PLANNING OPEN SPACES WITH AND FOR THE CHILDREN –
LOCAL CONTEXT OF KATHMANDU

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Zusammenfassung

Einleitung

Kathmandu, die Hauptstadt Nepals, wurde traditionell als kompakte Siedlung angelegt, die das Zufußgehen und die Nutzung öffentlicher Freiräume für die tägliche Routine auf multifunktionale Weise fördert (Pant & Funo, 2007). In den letzten Jahren hat jedoch ein schnelles und ungeplantes Wachstum zu einer erheblichen Zersiedelung mit begrenzten und unorganisierten öffentlichen Freiräumen geführt (Chitrakar, Baker, & Guaralda, 2017b). In letzter Zeit weist Kathmandu die gleichen Merkmale auf wie viele andere schnell wachsende Städte in der Region (Asien, Südasien). Im Wesentlichen handelt es sich dabei um eine ungeregelte Stadtentwicklung, eine unzureichende Durchsetzung der Bodenpolitik, schlecht gewartete städtische Infrastrukturen, den massiven Zustrom von Menschen aus den umliegenden ländlichen Gebieten und dem Hinterland, Bodenspekulation, übermäßigen Druck durch kommerzielle Aktivitäten und Lücken bei Angebot und Nachfrage nach grundlegenden Dienstleistungen (Ishtiaque, Shrestha, & Chhetri, 2017).

Dies ist der Kerngedanke dieser Forschungsarbeit, da ich als Bewohnerin der Stadt miterlebt habe, wie sich die Qualität des städtischen Lebens verschlechtert hat. Diese desintegrierte Stadt braucht dringend innovative und nachhaltige Ansätze, um ihre städtischen Probleme zu lösen. Dies zeigt sich am ständigen Wachstum der Stadt und dem Mangel an öffentlich nutzbaren Freiflächen. Kleine Kinder hingegen brauchen den Kontakt zur freien Natur. Viele Entwicklungsaufgaben, die Kinder benötigen - Erkundung, Risikobereitschaft, fein- und grobmotorische Entwicklung und die Aufnahme großer Mengen an grundlegendem Wissen - können im Freien stattfinden. Kinder lernen die notwendigen räumlichen, physischen, psychologischen, sozialen und analytischen Fähigkeiten, die für die Stadtkompetenz erforderlich sind, wenn sie direkten Zugang zu ihrer Umwelt haben (Shackell, Butler, Doyle, & Ball, 2008; Bento & Dias, 2017). Der Zugang zu grünen Freiflächen wird mit einer positiven Auswirkung auf die menschliche Gesundheit in Verbindung gebracht. Freiflächen sind auch Teil des städtischen Gefüges, in das die Bewohner ihre urbane Vielfalt einbringen können und so den Weg für eine demokratischere Gesellschaft ebnen. Dieses Argument stammt von Jane Jacobs, einer visionären Stadtforscherin aus den 1960er Jahren (Jacobs, 1961).

Die Zukunftsaussichten eines Kindes werden von vielen Faktoren geprägt, insbesondere von der Umgebung, in der es lebt. Sie ist die wichtigste Determinante für die Gesundheit, das

Verhalten und die Entwicklung von Kindern, was sich auch nachhaltig auf deren Erwachsenenalter auswirkt. Kinder brauchen ein Umfeld, das sie erforschen können und in dem sie lernen, damit zu leben und das sie darüber hinaus motiviert, es zu verbessern (ARUP, 2017).

Ein Kind lernt innerhalb von zwei Lebensjahren eine Sprache, lernt innerhalb eines Jahres laufen und lernt gleich nach der Geburt zu essen. All dies geschieht aus eigenem Antrieb. Wenn wir Kindern die Möglichkeit geben, sich in der freien Natur aufzuhalten - in Parks, Gärten und in der Wildnis -, lernen sie zu klettern, zu springen, zu rutschen, zu schaukeln und so weiter. Das sind ganz natürliche Instinkte. Wenn ein Kind dazu in der Lage ist, ohne dass man es ihm beibringt und mit sukzessiver Übung, warum kann ein Kind dann nicht durch Übung ein verantwortungsbewusster Mensch werden? Diese Übung entsteht durch Beteiligung, nicht durch erzwungene, sondern durch echte Beteiligung. Wir müssen diesen Prozess erleichtern.

Kathmandu hat sein soziales Milieu durch die Zersiedelung von Freiflächen und die Auflösung städtischer Formen verloren, was dazu geführt hat, dass die öffentlichen Räume für die Öffentlichkeit nicht mehr bewohnbar sind und die Kinder daher keine oder weniger Möglichkeiten haben, sich im Freien zu bewegen. Die Qualität der städtischen Umwelt wirkt sich in hohem Maße auf das Leben der dort lebenden Kinder aus. Ersteres betrifft Fragen der Stadtplanung, letzteres die Kinderrechte.

Freiraumstrategien (Open Space Strategies, OSS) sind geeignete Leitlinien für die Regierung und die Gemeinderäte zur Planung der derzeitigen und künftigen Nutzung von Freiflächen in einer Gemeinde. Diese Strategien stellen sicher, dass die Freiräume geschützt werden und ein Netz hochwertiger Freiräume geschaffen wird, die den jeweiligen Orten und Gemeinden enorme wirtschaftliche, soziale und ökologische Vorteile bieten können. Dazu gehören spezifische Pläne zur Förderung von Bürgerstolz und Identität, zur Aufwertung des physischen Charakters des Gebiets, zur Schaffung sicherer Schulwege und von Räumen zur Erholung und zum Spielen, zur sozialen Eingliederung sowie von Orten mit historischem und kulturellem Wert und Bildungseinrichtungen im Freien. Sie umfassen sogar Pläne zur Förderung der lokalen Lebensmittelproduktion und in größerem Maßstab zur Eindämmung des Klimawandels und zum Umgang mit diesem. Noch wichtiger ist, dass gesunde Orte, die Möglichkeiten für die Erfahrung der natürliche Welt bieten, Priorität haben (CABE Space, 2009).

Das Übereinkommen der Vereinten Nationen über die Rechte der Kinder (UNCRC) erkennt in Artikel 31 (United Nations, 1989) "das Recht des Kindes auf Ruhe und Freizeit, auf

altersgemäße Spiel- und Erholungsmöglichkeiten und auf freie Teilnahme am kulturellen Leben und an der Kunst" an.

OSS, die in verschiedenen Städten weltweit entwickelt wurden, und die UN-Kinderrechtskonvention liefern beide ähnliche Standpunkte zu diesem Thema. Daher sollten wir die Räume für Kinder und die städtische Umwelt nicht getrennt voneinander betrachten. Der gegenwärtige Trend berücksichtigt die Notwendigkeit, Räume für Kinder zu schaffen und dabei das Konzept der kinderfreundlichen Umwelt zu integrieren, das ihnen weltweit bereits vor einigen Jahrhunderten und in Kathmandu vor einigen Jahrzehnten standardmäßig gegeben wurde. Die Beteiligung und Mitwirkung von Kindern an der Planung und Pflege ihrer Umwelt ist heute allgemein anerkannt. Dennoch scheint es eine Verzögerung bei der Umsetzung dieses Konzepts in die Realität zu geben. Um dies zu erreichen, müssen wir auf sinnvolle Weise mit den Kindern zusammenarbeiten, was die Notwendigkeit einer partizipativen Aktionsforschung hervorbringt.

Ansatz - philosophisch und theoretisch

Sozialwissenschaftliche Forschung ist von zentraler Bedeutung für eine realitätsnahe Gemeinschaft. Sie stützt sich auf die sorgfältige Untersuchung von Erfahrungen, Ereignissen und Fakten in der sozialen Wirklichkeit durch die Menschen (Neuman, 2014). Partizipative Aktionsforschung (PAR) ist eine Methode, die Forschung und praktische Aktionen miteinander verbindet. Sie wurde in vielen Bereichen eingesetzt (Bildung, Organisation, Gemeindeentwicklung) und hat daher je nach Studie eine andere Terminologie erhalten. Der besondere Schwerpunkt dieser Studie ist die Aktionsforschung mit einem Fokus auf die Entwicklung der Gemeinschaft und den sozialen Wandel, auch um die Gemeinschaft in diesem Prozess zu stärken. Die Hauptschritte von PAR sind Planung, Maßnahmen vor Ort, Beobachtung und anschließende Reflexion der Ergebnisse der Intervention (Selener, 1997). In dieser Forschung wird es als Studieren-Planen-Handeln (Study, Plan und Act) Zyclus mit kontinuierlicher Überwachung, Bewertung und Reflexion (Monitoring, Evaluation and Reflection) entwickelt. Dieser Ansatz der Aktionsforschung wird im Rahmen meiner Arbeit auch durch mehrere philosophische Positionen gestützt, da ich glaube, dass ein philosophischer Hintergrund für einen Sozialforscher notwendig ist. Da sich diese Forschung in Richtung einer qualitativen Forschung bewegt, wurden verschiedene Theorien für die Analyse des Datensatzes genutzt. Als philosophischer Rahmen werden der Aktionsplan von Kurt Lewin und die

Beziehung zwischen Mensch oder Kind und Umwelt von Vygotsky, Piaget und John Dewey betrachtet.

Lewins Schlussfolgerung nach einer Reihe praktischer Erfahrungen "keine Aktion ohne Forschung, keine Forschung ohne Aktion" (Kindon, Pain, & Kesby, 2007) hat diese Forschung beeinflusst. Der Hauptgedanke von Piagets Entwicklungstheorie des Lernens und Denkens beinhaltet die Beteiligung des Lernenden, der das Wissen konstruiert und rekonstruiert. Vygotsky, der Piagets Konzept unterstützte, aber noch einen Schritt weiter ging, glaubte, dass das Kind kein einsamer Entdecker von Wissen ist, sondern dass es im Rahmen sozialer Interaktionen mit anderen lernt (Singer & Revenson, 1978). Seine soziokulturelle Theorie der kognitiven Entwicklung besagt, dass Kinder in verschiedenen Kulturen Denkweisen lernen, die für das Leben in ihrer eigenen Kultur und Gemeinschaft notwendig sind (McLeod, 2020). Deweys philosophische Überzeugung konzentriert sich auf die Entwicklung des Kindes zu einem wertvollen Mitglied der Gesellschaft - einer Gesellschaft, in der Gleichheit und Freiheit herrschen und in der demokratische Qualitäten und Ideale praktiziert werden. Damit ein Kind zu einer Gesellschaft gehören kann, sollte die Bildung, die es erhält, ihm soziale Kompetenz vermitteln (Sikandar, 2015). Alle oben genannten philosophischen Standpunkte machen es notwendig, die Umwelt der Kinder zu analysieren, wobei die Kinder als Teil dieser Umwelt betrachtet werden müssen und beide miteinander verknüpft und voneinander abhängig sind. Nach Paulo Freire (1970) und seinem feministischen Ansatz kann sich nur die gefährdete Bevölkerung, die in einer bestimmten Situation lebt, ihrer Situation voll bewusst sein. Anstatt sie wie Objekte zu behandeln, sollten sie daher teilhaben und sich neues Wissen aneignen sowie ein kritisches Bewusstsein für ihre Gemeinschaft entwickeln. Freires Arbeit zielte stets darauf ab, den Einzelnen von einer niedrigeren Ebene auf eine höhere Ebene des kritischen Bewusstseins zu bringen. Das Ziel war, die Menschen dazu zu bringen, sich an ihrem eigenen Lernen zu beteiligen, eine Kombination aus Aktion und Reflexion, die er Praxis nannte. Soziale Unterdrückung führt zu einer Kultur mit eingeschränkter Analysefähigkeit, und so haben sich die Initiativen zu einer Theorie des sozialen Wandels und des kritischen Bewusstseins entwickelt (Wang & Burris, 1997). Damit wird das Konzept der partizipativen Aktionsforschung bestätigt.

Als theoretische Grundlage für meine Studie habe ich den Ökosystemischen Ansatz nach Bronfenbrenner gewählt, da dieser die Entwicklung eines Kindes im Kontext des Beziehungssystems betrachtet, das seine Umwelt bildet. Dieses System definiert komplexe Umweltebenen, von denen jede einen Einfluss auf die Entwicklung eines Kindes hat. Der

Ökosystemische Ansatz zeigt, dass ein Kind zwar ein Individuum ist, aber auch von der Gesellschaft beeinflusst wird und im Laufe seiner Entwicklung beeinflusst es auch die Umgebung, der es ausgesetzt ist. Daher ist es wichtig zu überlegen, wie diese unvermeidliche Beziehung so verbessert werden kann, dass sie für beide Seiten von Vorteil ist. An dieser Stelle kommt die Gemeindeplanung ins Spiel (Vélez-Agosto, Soto-Crespo, Vizcarrondo-Oppenheimer, Vega-Molina & Coll, 2017).

Nach der Klärung des oben genannten Forschungsziels lauten die Forschungsfragen wie folgt:

1. Wie ist die Situation der Freiflächen in Kathmandu?

2. Wie nehmen Kinder ihre lokale Umgebung in Bezug auf Freiräume wahr?

3. Was könnte ein wirksames Modell sein, um eine echte Beteiligung der Kinder zu erreichen und eine Veränderung der Situation in den Freiräumen herbeizuführen?

Hintergrund

In der Vergangenheit hatten Kinder keine separaten Räume für sich selbst. Sie wurden in die alltäglichen Aktivitäten der Erwachsenen einbezogen und fanden innerhalb dieser Rahmenbedingungen Orte zum Spielen und Erkunden (Hart, 1979). Mit den Fahrzeugen auf der Straße und der Ausbeutung von Kindern durch harte Arbeit entstand die Notwendigkeit, sicherere Räume für Kinder zu schaffen. Nach und nach trennten diese separaten Räume die Kinder von der realen Welt und machten es ihnen schwer, Verbindungen zu ihren eigenen Räumen zu finden. Heute haben wir das Leben der Kinder, vor allem in den Städten, strukturiert und sie entweder auf das Haus oder auf bestimmte geplante Aktivitäten beschränkt (Vaneycken, 2020). Die ständige Herausforderung, das Leben in der Stadt zu verbessern, hat ihre Ursachen in diesen falschen Vorstellungen von Kindern und ihrer Umwelt.

In Ländern wie Nepal werden die Kinder in den städtischen Gebieten am wenigsten bevorzugt, da öffentliche Freiräume für Erkundungen als wahrscheinlicher Raum für wirtschaftliche Vorteile angesehen werden. Erwachsene sind mehr mit ihrem Alltag beschäftigt, Kinder und ältere Menschen haben keine Orte, an die sie in ihrer Freizeit gehen können. Umweltverschmutzung, Privatisierung von öffentlichem Land, Müllentsorgung, Baustellen, Abfälle und schlechte Infrastrukturen tragen zu einer unfreundlichen Umwelt bei. Die Regierung und die lokalen Behörden verstehen unter Entwicklung den Bau von Häusern und Straßen; in Parks, Spielplätze und Freiflächen wird nicht bevorzugt investiert. Selbst wenn Parks angelegt werden, sind sie meist weder umweltfreundlich noch zugänglich und einladend;

außerdem gibt es keine Absprachen oder Zusammenarbeit mit der Öffentlichkeit (Chitrakar, 2016). In dieser Situation werden Kinder aus der Gesellschaft ausgegrenzt und von der Erkundung ihrer Umwelt ausgeschlossen.

In einer solchen Situation wurde diese Forschung ins Auge gefasst. Seit meinem Masterabschluss im Jahr 2016 versuche ich mich mit Freiraummanagement. Von meinem Masterstudium bis zum Beginn dieser Forschungsarbeit habe ich immer wieder erlebt, dass nicht nur ein angemessener Planungsrahmen, sondern auch Interventionen an der Basis zur Lösung städtischer Probleme beitragen können, vor allem, wenn Expertinnen und Experten mit den gefährdeten Gruppen zusammenarbeiten, um die Kernprobleme zu identifizieren und Lösungswege zu erarbeiten. Mehr noch, wenn die für die Verwaltung dieser städtischen Gebiete zuständigen Behörden ihren Pflichten nicht nachkommen oder der Öffentlichkeit kein Gehör schenken, müssen die Methoden, mit denen ein Wandel herbeigeführt werden könnte, neu überdacht werden.

Prozess

Zunächst schlug ich den zuständigen Behörden meine Pläne vor, aber sie waren nicht sehr interessiert. Anstatt zu versuchen, die höheren Instanzen zu erreichen, beschloss ich, mit den Gemeinschaften zu arbeiten, in diesem Fall insbesondere mit den Kindern. Die Arbeit mit der Gemeinschaft würde dazu beitragen, Probleme und Fragen an der Basis zu erreichen, aber die Arbeit mit den Kindern würde eine ganz neue Perspektive eröffnen. Jüngste Praktiken, die mit Kindern im globalen Kontext durchgeführt wurden, zeigen, dass Kinder in der Lage sind, echte Probleme zu verstehen und Ideen zu deren Lösung zu entwickeln. Dies könnte dazu beitragen, die Gemeinschaft durch kritische Reflexion zu stärken und weiterzuentwickeln, und den Kindern helfen, durch ihre Beteiligung neue Dinge zu lernen. Vor allem die Einbeziehung von Kindern in die Entscheidungsfindung bei der Flächennutzung kann ihnen schon früh Verantwortung vermitteln, was wesentlich zur Entwicklung ihrer Fähigkeiten als verantwortungsbewusste Bürgerinne und Bürger beitragen soll (Horelli, 1997; Hart, 1997). Diese Dinge kann man ihnen nicht an einem einzigen Tag beibringen, wenn sie erwachsen sind, sondern es handelt sich um einen Prozess, der früh beginnen und über die gesamte Zeit hinweg entwickelt werden muss. Das Umfeld der Kinder spielt eine große Rolle bei der Gestaltung ihrer Zukunft. Um dieses Umfeld kindgerecht zu gestalten, ist eine direkte Abstimmung mit den Kindern unerlässlich. Die Sicherstellung einer effektiven Beteiligung und die Berücksichtigung der umliegenden Probleme, die berücksichtigt werden müssen, während man

sich mit den Anliegen der Kinder in Bezug auf ihr lokales Umfeld befasst, ist ein wesentlicher Bestandteil dieser Forschung. Dies wiederum trägt dazu bei, ein Umfeld zu schaffen, das für alle günstig ist. Viele Städte auf der ganzen Welt arbeiten daran, kinderfreundliche Städte zu schaffen, die ein gedeihliches Zusammenleben gewährleisten.Voraussetzung dafür ist, dass sich Kinder wichtig fühlen, dass sie einbezogen werden, dass ihnen zugehört wird und dass sie ermutigt werden, am täglichen Leben teilzunehmen, sowohl formell als auch informell (Chawla, 2002; Driskell, 2002).

Die "Planung von Freiräumen mit und für Kinder" ist ein solches Modell, das ich für die Arbeit mit Kindern entwickelt habe. Das Konzept bestand darin, Kinder einzubeziehen und ihre Ideen als Stimmen bei den jeweiligen Behörden einzubringen. Wenn es schwierig erscheint, vom Ganzen zum Teil zu arbeiten, sollte man den Ansatz vom Teil zum Ganzen wählen, der auch als Bottom-up-Ansatz bekannt ist. Um Veränderungen und Verbesserungen in einer Stadt herbeizuführen, scheint dieser Ansatz von Vorteil zu sein. Die Politik in Bezug auf öffentliche Freiräume mag Mängel aufweisen, aber selbst wenn sie gut ist, sehen wir keine Veränderungen in der Realität, solange sie nicht vor Ort getestet und Maßnahmen ergriffen werden, oder wir wissen nicht einmal, ob die Prozesse in der Realität funktionieren.

Kinder im Alter von 11 bis 16 Jahren waren Mitforscherinnen und -forscher und Teilnehmerinnen und Teilnehmer dieser Forschung und werden daher im Folgenden "Kleine Forschende" - Little Researchers (LRs) auf englisch, genannt. So wurde die partizipative Aktionsforschung (PAR) zur "Planung von Freiräumen mit und für Kinder" gestartet. Wir reden viel darüber, was getan werden sollte, wie es getan werden sollte, aber solange wir nicht mit dem Ansatz "wir müssen es tun" kommen, wie einer der kleinen Forschenden (LRs) sagte, ist die Veränderung nicht möglich.

Die Forscherin (ich selbst) musste mit dem gegenwärtigen Szenario vertraut sein. Daher war auch meine eigene Beobachtung wichtig. Die Rolle der Forscherin bestand auch darin, eine Grundlage vor dem Beginn der PAR zu schaffen- zum Beispiel durch die Auswahl eines geeigneten Stadtviertels, in dem die vorgeschlagene Aktionsforschung erfolgreich durchgeführt werden kann und in dem die notwendigen Veränderungen herbeigeführt werden können oder dringend notwendig sind. Durch die Sammlung von Sekundärdaten aus Dokumenten, Karten und früheren Studien wurden zunächst vier Arten von Stadtvierteln ermittelt. Eine Vor-Ort-Untersuchung dieser Stadtteile trug dazu bei, zwei Standorte für eine detaillierte Untersuchung auszuwählen. Nach der Auswahl dieser beiden Standorte, einer in einem zufällig wachsenden

Stadtkern und der andere in einem geplanten Wohngebiet, wurde der Prozess der partizipativen Aktionsforschung eingeleitet. Die Teilnehmenden (kleine Forschende, LRs) dieser Aktionsforschung stammten aus diesen beiden Vierteln und besuchten auch Schulen in ihrem jeweiligen Viertel.

Bei der Literaturrecherche wurde deutlich, dass ein partizipatorischer Ansatz bei der Arbeit mit den Kindern für eine veränderte Sichtweise unerlässlich ist. Auch bei den Fallstudien zeigten die Projekte anhand einer Reihe von Beispielen die Möglichkeiten der Arbeit mit Kindern in unterschiedlichen geografischen Kontexten. Vor diesem Hintergrund wurde eine Methodik entwickelt, die eine Spirale aus mehreren Aktionszyklen darstellt, von denen einer den anderen ergänzt und auch mit kleineren Folgeaktionen eine größere Wirkung erzielt.

In dieser Untersuchung habe ich bis zu fünf flexibel einsetzbare Aktionszyklen entwickelt, die wie folgt aussehen: Fotovortrag (Photovoice auf englisch), Reinigungskampagne, Ausstellung in größerem Maßstab und Gestaltung eines Parks mit den Kindern, virtuelle Diskussionsrunde und Experteninterview. Es handelt sich um einen zyklischen Prozess, bei dem die Schritte nicht beginnen und enden, sondern sich in vielen Aktionsspiralen fortsetzen.

Der erste Aktionszyklus ist der wichtigste Teil dieser Untersuchung, gefolgt vom zweiten Aktionszyklus. Daher wurde eine detaillierte Analyse dieser Zyklen durchgeführt. Der ersten Aktionszyklus (Studienphase) begann mit Literaturrecherchen, Fallstudien sowiephilosophischen und theoretischen Studien. In der Planungsphase wurde der Kontakt und eine Beziehung zu den ausgewählten Teilnehmerinnen und Teilnehmernsowie deren unmittelbaren Ansprechpartnerinnen und -partnern aufgebaut. In diesem Fall habe ich eine enge Verbindung zu den Schulen und ihren jeweiligen Behörden – Schulleiterinnen und -leitern und/oder Schulkoordinatorinnen und -koordinatoren - aufgebaut. Ich wandte mich an zwei Schulen an jedem Standort. Auf diese Weise war es einfacher und sicherer, mit den Kindern in Kontakt zu treten und auch die Teilnehmenden vor Ort einzubeziehen (in einigen früheren Studien wurden zu Beginn die lokalen Behörden und Eltern kontaktiert).

Für die Aktionsphase habe ich ein leistungsfähiges Instrument verwendet: "Photovoice". Unter Berücksichtigung des Ansatzes der partizipativen Aktionsforschung (PAR) wird Photovoice verwendet, um die Kinder als Forschende einzubeziehen, um einen sozialen Wandel zu bewirken. Photovoice nutzt Fotos und texte, um die Stimmen der marginalisierten Bevölkerung an die politischen Entscheidungsträgerinnen und -träger heranzutragen. Dabei werden Fotos gemacht und die Geschichten in der Gemeinschaft ausgestellt. Es handelt sich um einen Prozess,

bei dem Menschen ihre Gemeinschaft durch eine spezielle Fototechnik identifizieren, darstellen und aufwerten können. Der Entwickler von Photovoice erklärt, dass das, was Expertinnen und Experten denken, nicht unbedingt mit dem übereinstimmt, was die Menschen an der Basis denken (Wang, 1999). Paulo Freire forderte die Gemeinschaft auf, kritisch zu denken, über ihr tägliches Leben und die politischen Kräfte, die sie beeinflussen, zu diskutieren, und zwar durch visuelle Bilder. Photovoice geht noch einen Schritt weiter, indem es die Kameras in die Hände der Gemeinschaft gibt, so dass die Bilder von ihnen selbst gemacht werden und somit auch die Geschichten. Daher wird dieser Ansatz dazu beitragen, die Situation der Freiräume ausPerspektive der Kinder zu verstehen, da die jüngste Forschung mit Kindern diese als Expertinnen und Experten für ihr eigenes Leben betrachtet (Wang & Burris, 1994).

Die Flexibilität der Photovoice-Methode bot eine gute Grundlage, um die Forschung entsprechend der Situation vor Ort voranzutreiben. Sie half dabei, die Probleme an der Basis zu verstehen, insbesondere die der gefährdeten Gruppen, indem sie die Geschichten und Stimmen der Kinder hörte. Die Wahrnehmungen der Kinder werden durch Fotos mit Geschichten in Textform dargestellt. Ursprünglich sollten von jedem Kleinen Forschenden (LR) 20 Fotos gemacht werden, aber aufgrund fehlender Mobiltelefone oder begrenzter Gegebenheiten machten die Kinder viel weniger Fotos und arbeiteten von Anfang an in Gruppen. Dies war auch deshalb wichtig, weil die Teilnahme der Kinder von Anfang an freiwillig war und sie so die Freiheit hatten, zu zeigen, was und wie sie es wirklich wollten.

Die Daten wurden durch ethnografische Beobachtung erhoben und anschließend interpretativ und thematisch ausgewertet. Ich begleitete den gesamten Prozess, wertete die Daten aus und reflektierte sie für das weitere Vorgehen. Die von den Kindern geschriebenen Texte wurden gelesen und wieder gelesen, zunächst wurden Schlüsselwörter abgeleitet und für die weitere Diskussion interpretiert. Später wurden die Texte im Detail untersucht, indem sie in verschiedene Kategorien eingeordnet wurden. Im Laufe des Prozesses kristallisierten sich Themen heraus, die sich auf die Art der Freiräume, die Probleme in den Freiräumen, die Verantwortlichen für die Probleme und die möglichen Lösungen durch verschiedene Gruppen bezogen.

Es wurden Gruppendiskussionen mit den Kindern geführt, um weitere Ideen und Meinungen zu sammeln und gemeinsam eine Problemlösung zu finden. Workshops, Ausstellungen und Präsentationen trugen ebenfalls dazu bei, die Stimmen der Kinder bei den zuständigen Behörden und politischen Entscheidungsträgern zu Gehör zu bringen. Die Daten wurden auch

im Rahmen des hermeneutischen Kreises analysiert, da die Daten einzeln und als Ganzes in einem zirkulären Muster betrachtet werden mussten, das sich zwischen Aktion und Reflexion hin und her bewegt.

Eindrücke

Die von den Kindern identifizierten Themen entsprachen den neuesten Forschungsergebnissen auf dem Gebiet der Stadt-/Gemeindeplanung. In diesem speziellen Kontext hoben sie die Probleme der unkontrollierten Abfallentsorgung als Hauptursache für die Wasserverschmutzung und den Mangel an Grünflächen und Bäumen als Ursache für die Luftverschmutzung hervor. Und das Wichtigste von allem: sie waren in der Lage zu verstehen, dass die Probleme sowohl von ihnen (der Öffentlichkeit) als auch von der Regierung verursacht werden und daher alle zusammenarbeiten müssen, um die Probleme zu lösen. Es wurde festgestellt, dass die Kinder in der Lage sind, ihre Nachbarschaft in einer Weise zu beobachten, wie dies kein Außenstehender hätte tun können. Ein Beispiel dafür war die zentrale Grünfläche, die Außenstehende als einen Ort für alle sehen würden, an dem sie sich treffen und spielen können, aus Sicht der LR zeigte sich jedoch der am meisten diskriminierte Raum mit ungleichen Nutzungsvorteilen war. Ein anderes war ein offenes Privatgrundstück - aus der Sicht von Außenstehenden einfach ein weiterer ungenutzter, verschlossener Raum, die LR konnten früher allerdings dort spielen, weil es zuvor noch ein offener Raum war. Einige der von den Kindern aufgeworfenen Fragen gingen über das herkömmliche Verständnis von Problemen in offenen Räumen hinaus. So sprachen sie z. B. Fragen der Diskriminierung bei der Nutzung öffentlicher Flächen in ihrer Nachbarschaft an. Ein Mädchen bezeichnete ihr Zimmer und die Chatbox im Handy als ihren Freiraum, da sie der Meinung war, dass die meisten Kinder in ihrer Nachbarschaft so ihre Zeit verbringen, sich mit Freunden treffen und spielen. Im Hinblick auf den Mangel an Freiflächen schlugen sie eine multifunktionale Nutzung von Räumen vor. So könnten beispielsweise Schulgelände als Freiflächen in der Nachbarschaft genutzt werden, wenn die Schulen geschlossen sind, und die privaten Grundstücke, die von den Eigentümern leer stehen, könnten in der Nachbarschaft erschlossen werden.

Der Grund für die Probleme auf den Freiflächen, wie z. B. viel Müll und unbewirtschaftete Flächen, liegt nach Ansicht der kleinen Forschenden im mangelnden Bewusstsein. Sie sagten, dass es deshalb viele Kampagnen geben müsse, um die Menschen auf die Bedeutung von Freiflächen, Grünflächen und einer sauberen Umwelt aufmerksam zu machen. Sie schlugen auch vor, dass mehr Parks angelegt werden sollten.

Weitere Maßnahmen

Nachdem die Kinder diese Lösungen vorgeschlagen hatten, begannen wir mit der gemeinsamen Arbeit am nächsten Zyklus, um eine größere Wirkung zu erzielen. Daher wurde der zweite Zyklus - eine Reinigungskampagne - als unmittelbares Ergebnis des ersten Aktionszyklus geplant. Die Kinder übernahmen die Führung in diesem Aktionszyklus und sammelten Freiwillige für die Kampagne. Nach der Sitzung wendeten sie sich an verantwortlichen Behörden und äußerten ihre Besorgnis über die Verwaltung der Freiflächen. Sie teilten diesen auch mit, dass sie sich an solchen Prozessen beteiligen würden, wenn sie dazu eingeladen würden. Für den dritten Zyklus war eine Ausstellung in größerem Maßstab und die gemeinsame Gestaltung eines Parks geplant, die jedoch aufgrund der zu diesem Zeitpunkt laufenden COVID-19-Pandemie nicht stattfinden konnte. Dank der Flexibilität dieses Ansatzes konnte ich sofort alternative Lösungen planen. Da ein physischer Kontakt zu diesem Zeitpunkt nicht möglich war, plante ich ein virtuelles Online-Treffen mit den am Projekt beteiligten Kindern sowie mit anderen Kindern aus denselben Schulen. Die kleinen Forschenden sprachen über ihre Erfahrungen und ihr Wissen aus dieser Untersuchung und erklärten anderen Kindern die Bedeutung von Freiräumen und diskutierten, wie ein größeres Bewusstsein für Freiräume geschaffen werden könnte. Am Ende der Sitzung wurden alle Kinder, die an dem Treffen teilgenommen hatten, gebeten, über eine Online-Umfrage Lösungsvorschläge zu unterbreiten. Die Vorschläge zur Bewusstseinsbildung, die von den 72 neuen Teilnehmenden der Online-Umfrage gemacht wurden, ähnelten den Lösungen, die von den kleinen Forschenden wurden, wie z.B. Bewusstseinsbildungsprogramme, die Schaffung von Parks für alle und die Zusammenarbeit, um eine größere Wirkung zu erzielen. Nichtsdestotrotz hatten die kleinen Forschenden auch viele ortsspezifische Probleme genannt, die nur von den Menschen, die tatsächlich dort leben und davon betroffen sind, wahrgenommen werden können. Dies ist ein wichtiger Punkt, der den Einsatz von PAR ebenfalls rechtfertigt. Ich habe auch zwei Experten befragt, die meine Erkenntnisse mit den kleinen Forschenden untermauerten. Auf diese Weise wurden diese Aktionszyklen fortgesetzt und ließen auch viel Spielraum für eine Fortführung.

Schlussfolgerung

Diese Aktionsforschung hat dazu beigetragen, die Situation der Freiflächen in zwei Stadtvierteln von Kathmandu zu verändern. Diese Forschung hat gezeigt, dass es sich nicht um einen Prozess handelt, der anfängt und endet, sondern um einen kontinuierlichen Prozess, bei dem jeder Aktionszyklus dem nächsten folgt. Dies ist eine wichtige Erkenntnis, denn eine Stadt

ist ein dynamisches Gefüge, und auch die Räume in der Stadt verändern sich, so dass eine Methodik zu ihrer Verbesserung auch dieses Konzept unterstützen muss. Die sich ständig verändernde Beziehung zwischen dem Menschen und seiner Umwelt, die durch den philosophischen Hintergrund dieser Forschung abgeleitet wurde, unterstreicht diesen zyklischen Prozess noch weiter. Der zyklische PAR-Prozess hat dazu beigetragen, die Umwelt der Kinder und ihre Wahrnehmung der Umwelt zu verstehen, sie mit echter Beteiligung in die Entscheidungsfindung einzubeziehen und auf diese Weise eine städtische Umwelt zu schaffen, die für alle geeignet ist.

Eine Reihe von Kommunikationen und Interaktionen zum Thema während Gruppendiskussionen, Design Workshops und Präsentationen sowie Kleingruppentreffen ermutigten die Kinder, ihre Ideen und Fähigkeiten kritisch zu reflektieren. In der Feedbackrunde sagten sie, dass sie viel gelernt haben und ihr Verständnis für Freiräume und deren Bedeutung gewachsen ist. Sie trauten sich nicht zu, solche Veranstaltungen oder Programme selbst durchzuführen, aber sie sagten, dass sie auf jeden Fall mitmachen würden, wenn es Programme gäbe, die von Erwachsenen initiiert würden, und wenn sie zur Teilnahme eingeladen würden. Dies teilten sie bei der Reinigungskampagne den jeweiligen lokalen Behörden mit. Sogar während des Photovoice-Prozesses haben sie gezeigt, dass sie ihre Stimme erheben können, aber um Maßnahmen zu ergreifen, werden Erwachsene benötigt, da Kinder nicht über die nötigen Ressourcen verfügen, um dies zu tun. Erwachsenen und die jeweiligen Behörden sind daher in derPflicht, den Kindern solche Plattformen zu bieten, nicht nur für ihre Entwicklung, sondern auch, um eine bessere Gemeinschaft zu schaffen.

Bei der Analyse der Daten der Kinder konnte festgestellt werden, dass sie die Probleme nach der erforderlichen Interventionsebene kategorisiert haben und was ihrer Meinung nach nötig ist, um diese Probleme zu lösen: die Stimme erheben, zusammenarbeiten und aktiv werden. Zu Beginn der Untersuchung wurden die Kinder von mir angeleitet, mit dem Prozess fortzufahren. Bei der ersten Aktion verließen sie sich darauf, dass ich alles arrangierte, aber sie zeigten ihre Kompetenzen in bestimmten Bereichen. Bei der zweiten Aktion waren die Kinder jedoch wirklich an der Teilnahme interessiert und beteiligten sich in stärkerem Maße als bei der ersten Aktion. Sie sammelten die Freiwilligen selbst ein, begannen ohne Anleitung zu putzen, und selbst als es an der Zeit war, mit den Behörden zu sprechen, kümmerten sie sich darum, ohne dass sie darauf hätten hingewiesen werden müssen.

Eine interessante Erkenntnis war, dass, obwohl diese Art von Forschung, Projekt oder Studie noch nie am Forschungsstandort durchgeführt wurde, die Wahrnehmung der Kinder in Bezug auf ihre Umwelt ähnlich war wie die der Kinder in anderen Forschungsgebieten, im globalen Kontext, wie in den Fallstudien beobachtet. Auch die von ihnen vorgeschlagenen Interventionen waren mit den Ergebnissen der Fallstudien vergleichbar. Dennoch waren die Beobachtungen der Kinder auf einer tieferen Ebene kontextspezifisch und konnten nur von den Menschen, insbesondere den dort lebenden Kindern, beobachtet werden.

Eines der Hauptprobleme in den bestehenden Parks und Freiflächen war beispielsweise die eingeschränkte Nutzung. Eine der kleinen Forscherinnen sagte, dass dies nicht richtig sei: "Parks müssen für alle zugänglich sein, man darf nicht diskriminieren". In einer Gesellschaft, in der selbst die Stimmen der Erwachsenen ungehört verhallen, ist es die Aufgabe von Forscherinnen und Forschern und Aktivistinnen und Aktivisten, die Stimmen der Kinder zu erheben, der schwächsten Gruppen, die ihre Stimme noch erheben können. Einfache Lösungen wie ein Zeitmanagement für verschiedene Gruppen, die die Freiflächen zum Spielen oder für verschiedene Aktivitäten nutzen, würden das Problem der Raumknappheit lösen.

Als ich versuchte, mit den betroffenen Behörden darüber zu sprechen, Kinder und ihre Ideen und Konzepte in die Entscheidungsfindung einzubeziehen,waren diese für meine Idee nicht empfänglich. Sie konnten sich nicht vorstellen, dass Kinder aktive Bürgerinnen und Bürger sind. Schlimmer noch, sie hielten es nicht nicht einmal für wichtig, die Bedürfnisse oder Ideen der in der Gesellschaft lebenden Erwachsenen zu berücksichtigen. Um eine Beziehung zu den Bezirksbeamtinnen und -beamten aufzubauen und sie dazu zu bringen, den Stimmen der Kinder Gehör zu schenken, musste ich mehrere Besuche im Büro machen und jeder Beamtin und jedem Beamten erklären, wie wichtig das Projekt war. Auch wenn sie anfangs nicht überzeugt waren, halfen eine kontinuierliche Interaktion und Prozesse dabei, eine vertrauensvolle und wertvolle Beziehung aufzubauen. Ein rigoroser Prozess von Hin- und Herverhandlungen mit den Beamtinnen und Beamten der Stadtverwaltung, den Vertreterinnen und Vertretern der Schulen und den Gemeindegruppen beeinflusste schließlich den Prozess. Diese Prozesse, die Dialoge anregen und das Engagement der Gemeinschaft fördern, sind zeitgemäße Praktiken der kommunalen Planung, die die Menschen vor Ort stärken und zu greifbaren und nicht greifbaren Veränderungen beitragen.

Ein weiterer Aspekt, der zum Aufbau der Beziehungen beitrug, waren die Maßnahmen, die eine größere Wirkung erzielten. Als die Kinder und die Behörden zusammenarbeiteten, um ihr

Viertel zu säubern, entstand ein Gefühl der Zugehörigkeit und des Zusammengehörigkeitsgefühls. Die Kinder sprachen nach der Kampagne offen mit den Behörden, und die Behörden versprachen auch, weiter mit diesen Kindern zu arbeiten, indem sie sich an die jeweiligen Schulen wandten. Solche Methoden wurden eingeführt, um die Kinder in die Angelegenheiten der Gemeinschaft zu integrieren. Dies wurde durch Bronfenbrenners Ökosystemischen Ansatz gestützt, da sie die Rolle verschiedener Akteure wie Eltern, Lehrerinnen und Lehrer, Gemeindevertreterinnen und -vertreter und Gemeindegruppen bei der Veränderung des Umfelds der Kinder rechtfertigt.

Sowohl meine Beobachtungen (Forscherin) als auch die der Kinder (kleine Forschende) haben gezeigt, dass die Freiflächen in Kathmandu sehr rar sind, nicht gut gepflegt werden und nicht gleichmäßig verteilt sind. Verschiedene Gründe, wie schlechte Infrastruktur, Sicherheit und verschmutzte Umwelt hinderten die Kinder daran, ihre Umgebung zu erkunden. Nichtsdestotrotz waren sie in der Lage, ihre Umwelt zu beobachten und sie aus ihrer Perspektive zu zeigen. Sie waren in der Lage, die Freiräume in einer ganzheitlichen Weise zu betrachten. Freiräume sind nicht nur physische oder natürliche Räume, sondern sie zeigen Geschichte, soziale Beziehungen, Machtrollen, Diskriminierung, ästhetische Werte, und all dies wurde von den Kindern erwähnt.

Das Konzept, die Gemeindemitglieder mit Hilfe der Fotografie an den Entscheidungen über die für sie wichtigen Themen zu beteiligen, scheint eine Herausforderung zu sein. Aber diese Technik, die ihnen die Möglichkeit gibt, sich vor den politischen Entscheidungsträgerinnen und -trägern zu äußern und sich Gehör zu verschaffen, hat ihren Anliegen sicherlich mehr Gewicht verliehen. Wie dieser Prozess gezeigt hat, bei dem nicht einmal die Stimmen der Erwachsenen berücksichtigt werden, könnte die Arbeit mit Kindern als notwendiger Katalysator für einen sozialen Wandel wirken und nicht nur die Kinder, sondern die Gemeinschaft als Ganzes stärken. Das Wichtigste ist, dem Prozess eine Fortsetzung zu geben. Daher war es ein wichtiger Teil des Projekts, die lokalen Behörden mit der Schule und den Kindern, die Kinder mit den Gemeindegruppen, die Menschen vor Ort mit der Schule usw. zu verbinden.

Forschungsfragen beantworten:

1. Durch Literaturrecherchen sowie das Studieren von Dokumenten und Karten konnte ich die Situation von Freiräumen in Kathmandu analysieren, welche sich als selten und darüber hinaus als ungepflegt entpuppten und daher dringend einer Veränderung

bedürfen. Ethnographische Beobachtungen vor Ort halfen dabei, solche Stadtviertel ausfindig zu machen, in denen eine wirkungsvolle Veränderung erreicht werden könnte.

2. Die Partizipative Aktionsforschung mit Kindern half, ortsspezifische Probleme von Freiräumen zu identifizieren, indem diese ihre Wahrnehmung der eigenen Umwelt sowie ihre eigenen Ideen zu Verbesserung der Situation darlegten.

3. Schließlich wurde im Rahmen all dieser Prozesse eine Methode entwickelt, welche den Prozess der Partizipativen Aktionsforschung als Zyklus des Studieren-Planen-Handeln-Modells mit den Methoden der ständiger Überwachung, Bewertung und Reflexion verfeinerte.

Abschlusserklärung

Der Prozess der partizipativen Aktionsforschung, der in dieser Untersuchung als eine Reihe kontinuierlicher Aktionsspiralen von Studieren-Planen-Handeln mit Überwachung -Bewerten-Reflektieren (Study-Plan-Act mit Monitoring-Evaluation-Reflection) abgeleitet wurde, erwies sich als wirksames Instrument für die Forschung und die Arbeit mit den Kindern. Das Ergebnis zeigte, dass die Rolle der Kinder in der Freiraumplanung einen Wandel in der Gesellschaft bewirken kann. Der Prozess kann daher als Katalysator für urbane Innovation wirken und die allgemeine Entwicklung eines Kindes zu einem verantwortungsbewussten Individuum unterstützen. Dies half dabei, die Wahrnehmung der Kinder für ihre Umwelt zu ermitteln. Die Kinder waren in der Lage, Probleme im Zusammenhang mit Freiräumen zu beobachten, zu verstehen und sogar zu lösen und ihre Stimme dafür zu erheben. Durch diesen Prozess sind sie sich ihrer Umwelt bewusst und können kritisch reflektieren, gemeinsame Entscheidungen treffen und zusammenarbeiten, um eine Veränderung herbeizuführen und sich zu verantwortungsbewussten Bürgerinnen und Bürgern zu entwickeln.

Das Hauptziel dieser Studie war es, eine Methodik für die Arbeit mit Kindern zu entwickeln, damit sie zu einem wichtigen Rahmen für Fachleute wird, die mit Kindern arbeiten, nicht nur im Bereich der Stadt-/Gemeinschaftsplanung, sondern in verschiedenen Bereichen. Daher ist die entwickelte Methodik demokratisch, transdisziplinär, handlungsorientiert, kritisch und reflektierend, transformativ, pädagogisch, flexibel und anpassungsfähig und ein kontinuierlicher Prozess.

Abstract

A child learns a language within two years of his/her life, learns to walk within a year, and learns to eat right after being born. All this happens by their own will. Further, when we provide children opportunities to explore the open spaces – parks, gardens and wilderness, they learn to climb, jump, slide, swing and so on. Children learn the necessary spatial, physical, psychological, social and analytical skills required for urban competence when they have direct access to their environments. If a child is able to do this without being taught and with gradual practice, why can't a child be a responsible human being by practice? This practice comes from participation, not forced, but genuine participation. We need to facilitate such process.

Historically, children did not have separate spaces for themselves. They were involved in the daily activities of the adults and found places to play and explore within this entity. With the vehicles on the street and the exploitation of children through harsh labour, there was a need to provide safer spaces for children. Gradually, these separate spaces segregated children from the real world and made it hard for them to find connections with their own spaces. Now, we have structured children's lives, especially in the urban areas, restricting them either inside the house or into some planned activities. The quest to make city lives better has its challenges rooted in these misconceptions about children and their environment.

The ever-disintegrated urban form is in dire need of innovative and sustainable approaches to solve its urban issues. Children on the other hand need these environments of exploration, thus learning to live with it as well as be motivated to make it better. The former covers the issues of urban planning, and the latter considers child rights. Open Space Strategies (OSS) developed in various cities globally and the United Nation's Convention on the Rights of the Children (UNCRC) both provide similar grounds on this matter. Hence, we should not separately see children's spaces and the urban environment. The current trend however considers the need to provide spaces for children in their own right; integrating the concept of child friendly environment which was given to them by default few centuries back globally and few decades back when it comes to the context of Kathmandu. Recent practices carried out with the children in the global context show that children are capable of understanding genuine problems and develop ideas to solve them. Especially, it is important to introduce children to land use decision-making to educate them early on about social responsibilities. This concept also aligns with the Education for Sustainable Development (ESD) concept of taking transformative actions to problem solving. These things cannot be taught in a single day when children become

adults, it's a process that needs to start early on and be developed throughout. To be able to make child friendly environment, direct consultation with the children is vital. Considering the issues that needs to be taken care of while addressing children's concern about their local environment ensures effective participation. This in turn helps in creating an environment which is favourable for all. A child must be able to feel important, involved, listened to and encouraged to participate. Though a well-accepted argument, still there seems to be lag in turning this concept into reality. Hence, we must work together with the children in a meaningful way thus bringing forth the need of Participatory Action Research. Participatory Action Research (PAR) is a method that unites research with action. The three main steps of PAR are Study, Plan and Act. Based upon the general PAR process, a new model was developed in this research. A prior study, planning action and then taking action with a continuous process of Monitoring, Evaluating and Reflection are key steps developed in this research.

Study – In countries like Nepal, least preferences are given to the children in the city areas as the open lands for explorations are seen as probable spaces for economic benefits. Adults are more concerned about their mundane, children and elderlies do not have places to go in their free time. Pollution, privatisation of public lands, garbage disposal, construction sites, wastes and poor infrastructures are all contributing to unfriendly environment. Government and local authorities are taking development as building houses and constructing roads; parks, playgrounds and open spaces are not given preferences. Even when they make parks, mostly they are not environment friendly nor accessible and inviting; as well as there is no or minimal consultation or collaboration with the public and experts. With this situation, children are disintegrated from society and excluded from chance of exploration of their environment.

Plan – In such a situation this research was envisioned. I have been trying to work on open space management since I completed my master's degree in 2016. I proposed my plans to the respective authorities, but they were not so interested. Hence, instead of trying to reach the higher bodies, I decided to work with the communities at the grassroot, especially children in this case.

Act – 'Planning open spaces with and for the children' is one such model I developed, through literature review, case studies, and philosophical and theoretical backdrops, to work with the children. The concept was to engage children and bring forward their ideas as voices to the respective authorities. Children of age 11-16 were co-researchers and participants in this research. Initially I did my own study to find out the situation of open spaces in Kathmandu by

reviewing documents, policies as well as the onsite scenario through my observation. Then I worked with the children to understand their perspective on two specific sites of Kathmandu. I took a democratic, transdisciplinary, action-oriented, critical and reflective, transformative, educational, flexible, adaptive and continuous methodological approach of working with the children. A cyclic process was developed, where the steps do not start and end but continue into many action spirals.

For the first Action cycle, I have used a powerful tool 'Photovoice' to generate the data as voices of the children. Photovoice uses photographs to bring the voices of marginalized population to the policy makers. The developer of photovoice explains that what experts think may not match with what people think at the grassroots. Children's perceptions were represented with photographs taken by themselves with stories. It was followed by group discussions with children to bring out more ideas, critical reflection and for collective problem-solving. Workshop, exhibition and presentation further helped in bringing out their voices more strongly. The issues identified by the children were in line with the latest research in the field of urban/community planning. In this particular context, they highlighted the issues of unmanaged waste as a major cause of water pollution, lack of greenery and trees as the cause for air pollution. And the most important of all, they were able to understand that the issues are created by them (public) as well as government and therefore everybody must work together to solve them. They proposed multifunctional use of spaces as there is limited open spaces in the city. Lack of awareness was one key issue raised by the children, and they said that for this, there must be a lot of campaigns to make people aware of the importance of open spaces, greenery and a clean environment. Hence accordingly, the next action cycle was planned which was the Cleaning Campaign. Likewise, further actions were taken.

Hence, Participatory Action Research developed as a continuous spiral of Study-Plan-Act cycles with Monitoring-Evaluating-Reflecting proved to be a valid methodology on working with children. In this research, it helped to make children aware about their environment, to make them capable of thinking critically and making decisions, and in the process, improve their environment or bring about a social change. A city is a dynamic fabric and the spaces in the city are also changing, hence a methodology for its improvement must also support this concept. Children are also growing, learning and adapting to their environment. This ever-changing relationship between humans and their environment further highlights this cyclic process. This methodology can be used as a tool by researchers in various discipline or anyone who wants work with children in a constructive manner.

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1   The Case

Kathmandu valley's towns' (Kathmandu and two neighbouring towns – Lalitpur and Bhaktapur) architecture and settlement patterns are considered unique within the cultural zones of South Asia. The formation of individual dwellings, organisation of the neighbourhood, urban squares, community spaces and buildings show this pattern (Pant & Funo, 2007). These towns have traditionally been built as compact settlements that encouraged walking and the use of public open spaces. However, in recent years, rapid and unplanned growth has led to urban sprawl with disorganised public open spaces (Clean Air Network Nepal, 2013; Chitrakar, Baker, & Guaralda, 2017b).
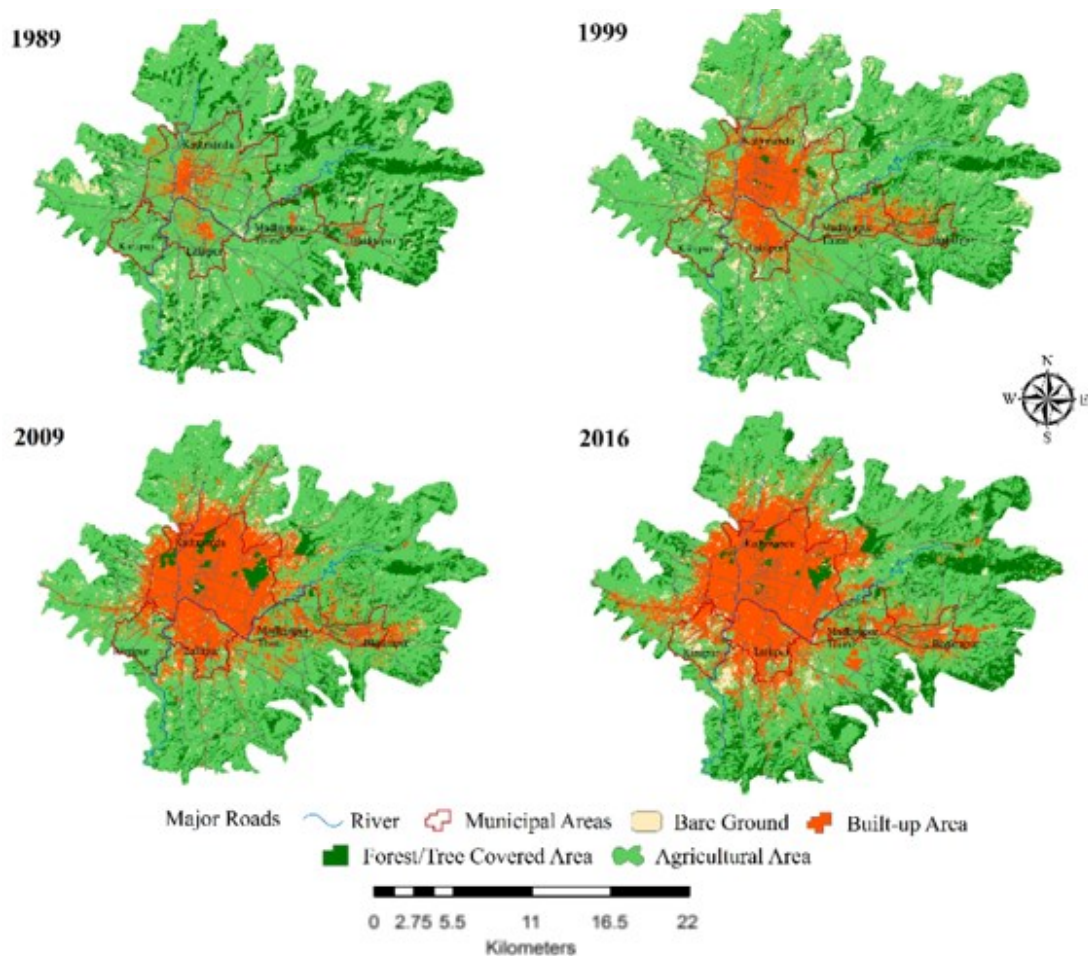
Figure 1.1 Rapid Urbanisation Trend in Kathmandu Valley, Nepal (Ishtiaque, Shrestha, & Chhetri, 2017).

"Where are the grasses, where are the lawns, where are the meadows where I once ran along?"[1]

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[1] Researcher's self-expression

1.1 Where do the Children Play?

"As I was growing up, I had a lot of opportunities to walk around my neighbourhood. I could go to the nearby ground and play with my friends; I enjoyed the chilling winter mornings by playing marbles in the streets and summers by making my cheeks red with the heat. My house was my playground, my whole neighbourhood was my playground. We discovered many games – we had different locations to play them during different time period of the day. I actually had more than one neighbourhood which I could call mine – my home, my grandparents' home, aunties' homes - the most favourite being mine and my grandparents' home as I had spent most of my childhood in these two places. At the age of 14, I had to leave Nepal for two years. But by this time, I already had a deep connection to my place – hence, I always had a feeling that I will return to my place."[2]

In the book – 'Growing up in an urbanising world', this is termed as 'place attachment' – a vital component of community building (cf. Chawla, 2002).

The challenges and opportunities of Kathmandu have attracted people from different parts of the country; almost 32% of the population are internal migrants (Thapa & Murayama, 2010). The city core area has become overcrowded and very expensive. The migrated rural population started residing in the periphery, where they had equal opportunities and facilities, but the land cost was lesser (Kathmandu Valley Development Authority [KVDA], 2015). These new settlements are mostly unregulated without proper infrastructure and have lesser provision for public open spaces. Hence, compromising children's free movement and social interactions (Chitrakar et al., 2017). A child's prospect is shaped by many factors, especially the environment they live in. It has to be the key determinant of their health, behaviour and development, which has a lasting effect on their adulthood (ARUP, 2017). As one can see from Figure 1.1, in about three decades, the built form of Kathmandu has drastically changed, with the urban area expanding up to 412% with massive conversion of agricultural fields (Ishtiaque et al., 2017).

Young children need to get exposed to the outdoor. Many developmental tasks that children need – exploring, risk-taking, fine and gross motor development, and the absorption of vast amounts of basic knowledge- can occur in open spaces (Johnson, Christie, & Wardle, 2010). Children learn the necessary spatial, physical, psychological, social and analytical skills required for urban competence when they have direct access to their environments (Hillman,

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[2] Researcher's self-expression

Adams, & John, 1990; Kyttä, 2004; Prezza, Cristalla, & Luigi, 2005; Spencer & Woolley, 2001). Daily activities such as walking, cycling, and play are helpful to support a physically active population. In contrast, high-density traffic, poor air quality and a lack of public space can discourage people from being physically active (WHO, 2020; UNDP, 2021). The dominance of cars in cities is also one of the most significant barriers to child-friendliness and a key factor in preventing parents from granting children independent mobility. In developing countries, the impact is extreme due to a high level of environmental pollution and traffic accidents. This impacts their lives negatively, as with less mobility, they have reduced ability to navigate and experience the city, meaning fewer chances for social interaction, encounters, playful journeys and discovery (ARUP, 2017).

Outdoor exploration is decreasing nowadays also due to excessive computer and television use, overloaded academic curriculum, and even if outdoor activities take place, these are controlled and supervised, which gives the children less chance for creativity and the possibility to explore (Munoz, 2009). Along with this, encouragement of access to the open spaces is also diminishing.

1.2 Background

1.2.1 Children

"A child means every human being below the age of eighteen years unless under the law applicable to the child, majority is attained earlier" (United Nations, 1989, p.3).

The above's statement being truly physical; childhood is sometimes described as a state of mind experienced ideally between ages one and a half to sixteen (Dudek, 2005). The transition from childhood to adulthood does not have a distinct line except for the age limit; hence it is arguable when childhood finishes, and adulthood arrives. However, by practice, for the transition to be smooth, giving children a lot of opportunities to explore, play and experience, helps. Creativity is embedded in children at an early stage (Vygotsky, 2004). Carruthers (2003) proposes that adult creativity and children's play are minor processes; the former being understood as practice of the latter. However, the approach of promoting the creativity of a child in an ideal scenario (Azeri, Parvizi, Khaleghi, & Hosseini, 2015) seems vague; the surrounding of the child, related to identities and culture in the creative process, is influential (Birch, Parnell, Patsarika, & Šorn, 2016). Spaces must be perceived as tangible as well as social and discursive construction as children have a dynamic relationship with the physical spaces to construct social meanings (Gutman, 2013).

The understanding of childhood has evolved throughout the centuries. Historically, childhood was not considered a special period of the life – detaching it from social and family issues; but it was integrated with the daily lives of the adults, thus creating a society of harmony and balance (Gutman, 2013). This also meant that their activities were not structured or controlled and they had the freedom to play which is significant in promoting learning, like the age of hunter-gatherers, where children learn to "make friends, overcome fears, solve problems and take control of their lives" through play (Gray, 2013, p. 17). This kind of transformative learning, whereas to find solutions for the challenges of today and future is in line with the concept of Education for Sustainable Development as well as Sustainable Development Goals. The more children are exposed to their environment, freely and without adult interference, the more they learn how to tackle with the issues around them (UNESCO, 2021).

I am a free bird, as free as I can be. Let me fly over the sky and catch those bumble bees. No let them fly high too, don't let them sting. Just like us they foster when we let them be. Let them fly. Then only the flowers will blossom. For you and I.[3]

1.2.2   The City

"Like a piece of architecture, the city is a construction in space, but one of vast scale, a thing perceived only in the course of long spans of time" (Lynch, 1960, p.1). A city is always dynamic. The stationery physical element gives structure to the city but its moving elements, for example, people, traffic, the landscape that changes each season, all play an important part in making an image of a city. We are not merely observers but are part of this whole scenario , as Dewey believed we also play a part in altering our environment as much as it changes our perceptions (cf. Sikandar, 2015).

The basic need from an urban environment is same for all age groups: safe and clean streets, access to green space, clean air, things to do, the ability to get around, the freedom to see friends and somewhere to call home. How this is achieved varies according to each cultural, socio economic and environmental context. The core of physical and social aspects is unchanged in any city and the underlying issues remain the same, but the way they are approached varies (ARUP, 2017). For all these activities, open spaces are vital and planning these spaces must be done to maximise the benefits.

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[3] Researcher's self-expression

1.2.3 Open Spaces

Open space has a range of meanings, from 'green space' (parks, greenways, reserves etc.) to all public open space (including streets and squares) to private open space (gardens, courtyards) (Swanwick, Dunnett, & Woolley, 2003; Hossain, 2014). From informal seating corners to large civic set areas, from formal public spaces focusing on public life, activities, and events to simply places to rest, hang out or play, public spaces could be everything from traditional squares to incidental urban spaces (Carmona, 2018).

In recent times, a new sort of spaces have been seen that even questions our belief of what public space could be, with a new approach to form, function and management (cf. Carmona, 2018). The concept has been expanded to include the part of the built urban fabric which are open to the sky, like roofs, terraces, balconies etc. and even the walls of buildingsclad with vegetation. Public spaces could also mean enclosed spaces, but urban open spaces are the open areas for public use that are situated within the urban fabric of the city (Holub, 2011). Hence, covering all non-built-up spaces within the administrative boundaries of a town or a city.

So conclusively, with this extended definition, urban open space can be seen as a continuous matrix of spaces within which all the built components of the city are situated, which flows between and over the buildings, linking the urban centre with the surrounding peri-urban and rural landscape (REC Slovakia, 2011). Land use planning and management must balance the natural and cultural ecosystem services offered by different open space types as they provide different levels of these services (Alberti, 1999; Daily, et al., 1997). Cultural acceptance is essential to maintaining ecosystem services (Daily, 1993; Nassauer, 1992).

Note – Open Space, Public Open Space, Urban Open Space, Green Open Space, Public Space are considered the same in this research.

A sustainable future is the need of today. This can also be understood from the 2030 Agenda for Sustainable Development from the UN sustainable development goals (United Nations, 2015). Nepal also has a sustainable development agenda valid from 2003 to 2017 (Government of Nepal [GoN], 2003). Open spaces and an approach toward its strategic management can make the most of their effect to contribute to a sustainable future at the local, regional and national levels (Commission for Architecture and the Built Environment [CABE] Space, 2009). It is necessary to provide urban Open Spaces to have a high-quality urban environment. This may also result in environmental, social and economic benefits to the society as well as over wellbeing of an individual (Woolley, 2003; CABE Space, 2009).

1.3   Urban Planning and Open Spaces

Urban planning has been witnessed in many earlier civilisations with the concept of street systems, rectilinear and radial, quarters and commanding central sites with palaces, temples and civic buildings. As the population grew, the cities started to become overcrowded. Then conscious attempts to plan the cities started to appear in Europe to improve circulations and defence. Later in the 16th till the end of 18th centuries, many cities were built with monumental magnificence (Fainstein, 2021). 'City beautiful' and the 'garden city' approaches had been introduced in the urban planning scenario, though not widely accepted, but applied in few residential places (Jacobs, 1961). Urban planning was influenced not by the planners but by many other drivers – industrial era, the great depression etc. Hence, politics and economics had the power to shape the cities. Urban planning was then institutionalised with acts at the government level. A new planned city thereafter did not easily succeed as the sense of belonging was not felt as in the old cities. This was criticized even more after the World War II as there were massive housing and rebuilding programs. The modernist model was to demolish and reconstruction as per the direction of planning officials, with no suggestion from the public who are living there. A visionary urbanologist Jacobs (1961) foresaw the effect of this to the human society in around 1960s. Destroying the complex social fabric weaved by the inhabitants, a city dwells in inhuman orderliness. Though only supported by few urban social activists at the beginning, by the end of the 20th century, this modernist planning approach was shunned and Jacob's arguments of urban diversity, reuse of old structures and an overall sustainable approach was considered essential. This gave way to participatory approach to planning as well, thus a way for democratic society (Caves, 2005; Fainstein, 2021).

Parks had started to appear well during the 18th and 19th centuries, though not accessible to all. The term "open space" was probably used for the first time in the year 1833, by the selected committee on public trails in London (Maruani & Amit-Cohen, 2007). Green spaces were used for creating solutions to contemporary issues since the beginning of the concept of urban park development in the 19th century (Loughran, 2018). In the early 20th century, efforts were made to improve the urban environment for the population who worked in rather unfavourable conditions. Parks were developed to provide recreation and relaxation with healthy play. Not only playgrounds for children were made in small congested spaces, facilities for games and sports were also provided for the adults. At that time, Central Park of New York was the inspiration to build large greenspace in the heart of the city. In the first half of 20th century, the

policy makers in western industrial cities, regulated different fabrics of urban planning to facilitate the city as a whole (Fainstein, 2021).

1.3.1   Children and Open Spaces – Historical Background

1.3.1.1   Global History

Streets, pavements, front yards of the houses were where children used to play, especially, the street was the primary play space for European and American children for centuries. There was no separate playground or parks for children. Going as far as 17th century, separate places were not set aside for the children in the western European houses. Children and adults lived together and worked together in communal areas within the home. This tendency for

Figure 1.2. Children playing on footpath, London's East End, 1929 (Dudek, 2005).

children to create their own rules for the use of public spaces continued up onto the twentieth century (Mason, 2004). However, by the turn of the 19th century, purpose-built spaces exclusively for the children started to appear with the belief that childhood is a special phase of human existence. These kinds of practices started generally from affluent families and then slowly got integrated into the middle-class mass. Creating separate spaces and materials for the children was, nonetheless, segregating the children from the adult or the real world (Gutman, 2013). As the cities continued to grow, the expansion was limited to agricultural land. But after the industrial revolution, there was rapid movement of people from rural to urban areas. City became crowded and the quality of life decreased and the open spaces in the peripheral areas were isolated. Now the ever-congested city pattern was diminishing children's mobility, especially the middle-income group (Maruani & Amit-Cohen, 2007). Later in the 20th centuries, the suburbs where communities were living were heavily car dependent – the streets and open spaces planned with preference for cars and parking, hence, ignoring the very walkability and pedestrian friendly built.

1.3.1.2 Local History

In Kathmandu valley (including three cities – Kathmandu, Lalitpur and Bhaktapur), open spaces in the traditional houses have been used as multipurpose entity. The open spaces were integrated as part of the urban fabric instead of treating them as a separate unit. In around 14th century, Kathmandu was going through a major leap in urban planning. The whole city form appeared as one unit with houses and courtyards, streets, stone spouts, temples, palaces and squares and a lot of land in the periphery for agriculture; the open spaces – courtyards and bahals[4] formed the dominant part of the settlements (Pant & Funo, 2007). There is no evidence of
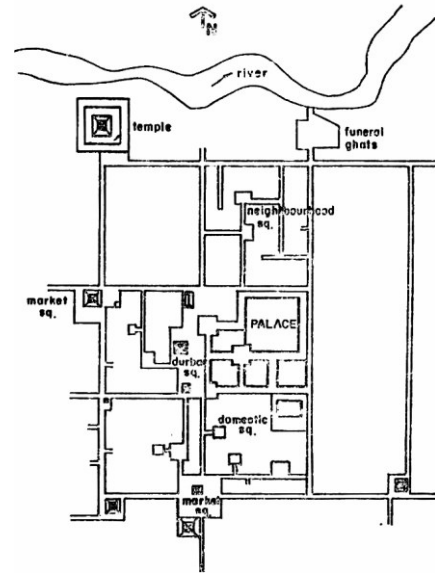
Figure 1.3. A diagrammatic layout of a typical Malla town (14th century) showing a hierarchy of open spaces (Pant & Funo, 2007).

planning spaces for children but was by default integrated into the urban fabric. For example, where the adults are doing their chores, children are also playing nearby. And, as they were enclosed by buildings, they became safe places to play for the children (Chitrakar, 2006).

Kathmandu did not quite go through industrialisation phase as described by Mumford (1938) but moved directly from medieval era to modern era in 1786 (cf. Sengupta & Upadhyay, 2016). More important, the urban landscape change started to appear in the 20th century with massive transformation as a result of urbanisation and globalisation. Starting from high profile palaces and monuments, the trend flowed towards privately owned built housing (Sengupta & Upadhyay, 2016). This started giving rise to houses which did not follow the traditional built up – building around the courtyard; but started standing in isolation, with less or no provision for open spaces (Chitrakar, 2006).

1.3.2 Children and Open Spaces – Contemporary Scenario – Kathmandu

As haphazard urbanisation is taking place in rapid pace, the demand for public open spaces is ever increasing (Resource Centre for Primary Health Care, 2016) as there has been significant loss of public spaces as a result of controlled development in most urban areas (Adhikari, 1998; Kathmandu Metropolitan City/World Bank, 2001; Chitrakar et al., 2017). Kathmandu city is in the verse of losing all its social milieu (Timalsina, 2020; Chitrakar, 2016). Citizens are not

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[4] Bahal – a typical courtyard in the Newari (indigenous ethnic group of Kathmandu valley) settlement paved with stone or bricks often has a small shrine and/or well (Pant & Funo, 2007).

getting quality life through parks and open spaces in the city, children are especially affected by this as they do not have places to play (Chitrakar, 2016). Streets are no more pedestrian friendly thus affecting children's independent mobility (Shrestha, 2011).

The development of parks is taking place in the recent time at community level but local participation is very low, community is not involved while designing and planning parks (Chitrakar, 2016). Based on observations, when they are supported by the government and initiated by the communities, the role of experts is minimal in designing such spaces. To make the process and the outcome a success the role of both community as well as experts supporting such process is vital (Horelli, 1997).

There are few existing parks and public spaces within and at the periphery, they are not prioritized for maintenance and are immensely overused by the urban population who is in desperate need for recreation and greenery (Zurick & Rose, 2009). The history of public park shows a scarce picture as the first formal park of Kathmandu - *Bhugol Park*, was established in 1934 AD (Pun, 2021). Government realising the importance of open spaces has been trying some management and improvement of existing parks, such as *Ratna* Park, *Balaju* Park. These parks even have provision of children's spaces and playground. But, in terms of its capacity to fulfil the requirement of the mass of population, the effort seems insufficient (The Kathmandu Post, 2015; Zurick & Rose, 2009).

1.3.3   Urbanisation

In around the end of twentieth century and starting of twenty first century, many international scholars highlight the same issues with many cities all around the world – rapid transformation (Jacobs, 1961; Trancik, 1986; Gehl & Koch, 1987; Oldenburg, 1989; Tibbalds, 1992; Ellin, 1997; Banerjee, 2001; Orum & Neal, 2009; Carmona, Heath, Oc, & Tiesdell, 2010; Madanipour, 2010). Global north or global south, the challenge of growing up in cities brings concerns related to healthy and safe living conditions, recreational spaces, transport, urban poverty etc. The effect is on the lower income families who have to settle in less desirable neighbourhoods due to housing price, quality and services (Krishnamurthy, 2019).

The ongoing work on child friendly cities explores and highlights the role of housing, infrastructures, governance as well as play and green as important prerequisites for living in the city with children. No matter the continuous effort to make children's lives better, they are being constrained, structured and often unfavourable has been witnessed by many researchers.

And in the process, we are not only disturbing their lives but at the time, risking the future of our cities.

"Children and young people have the potential to be more resilient, responsible, capable and creative than we give them credit for. Yet their lives are becoming ever scheduled, controlled and directed." – Tim Gill (Rethinking Childhood, 2010).

To reverse this trend and to contribute towards a more inclusive and sustainable future at local, regional and national level, strategic approach to open space planning is important (CABE Space, 2009). It can bring a huge range of benefits – social, cultural, ecological, economic and mainly health benefits. To have socially inclusive, community cohesive and considering overall well-being of the inhabitants, comprehensive planning policies for open spaces are fundamental. It helps in developing framework for local authorities and their stakeholders which needs constant reviews, monitoring and adaptation (CABE Space, 2009).

1.4   Problem Statement

Historically witnessing, both in western countries and in Kathmandu, the neighbourhood spaces that supported children's free movement and exploration were not designed specifically for children, but everybody could use it. This kind of provision gave children independency and responsibility, and a lot of scope for learning (Hart, 1979). Later, spaces were designed only for children as child rearing was being considered and designed successfully, which has been mentioned earlier. But contemporary childhood scholars supported the idea of two German sociologists Helga Zeiher and Hartmut Zeiher that this kind of division is called the "Islanding" of childhood – the tendency to insulate children's spaces from one another, as well as from the spaces used by adults (cf. Vaneycken, 2020). This islanding concept is quite opposite to the recent concept of child friendly cities. Independent mobility, ease of access, places to explore on their own, natural world etc. are some examples of how a child friendly spaces approach could be taken (Chawla, et al., 2012; ARUP, 2017).

With the transformation of modern cities, the contemporary public space is also changing. Due to this urban change, residential developments are confronted with the problems of the loss of public spaces and the decline of public realm (Jacobs, 1961; Trancik, 1986; Gehl & Koch, 1987; Oldenburg, 1989; Tibbalds, 1992; Ellin, 1997; Banerjee, 2001; Orum & Neal, 2009; Carmona et al., 2010; Madanipour, 2010), the spaces quite often ignored as residual spaces (Madanipour, 1999). Worpole and Knox (2007, p. 4) however claim that "public space in neighbourhoods, towns and cities is not in decline, but is instead expanding." There is a need to reframe the

debate of the loss of public space in broader terms and to consider how people use different urban places regardless of their ownership and appearance. With reference to this, spaces considered as "third places" in contemporary cities in the forms of cafes, restaurants and other similar activities could be seen with the same perspective (Oldenburg, 1989). This noticeable shift in public sphere, from public spaces to the semi-public or private realms, is giving rise to privately owned public spaces. Scholars point out this phenomenon as the privatisation of public space in the contemporary cities (Trancik, 1986; Carr, Francis, Rivlin, & Stone, 1992; Madanipour, 1996; Banerjee, 2001). This increasing private control of the public realm tend to put these spaces in the hands of those who view the physical environment as a means for creating profits. This trend has also been observed in Kathmandu (Chitrakar et al., 2017). There is a huge discrimination in the use of these spaces, for example, teenagers in outdoor spaces are viewed as potential troublemakers and excluded or marginalised from these spaces. These spaces attract the consumers and therefore the people, particularly teenagers when they use these spaces for non-commercial activities are seen as nuisance in the society. It also shows the vulnerability of children as 60 % of the world's children will live in urban area by 2025, the problems will be faced by the lower income families who live in the cities, both in global north and south, where they have to settle in less desirable neighbourhoods due to housing prices, quality and services (cf. Krishnamurthy, 2019).

Parents are also concerned that the older children may become committers or the victims of violence and vandalism. This kind of seclusion further worsens mixed age group activities. Further, children need places where they can meet and create their own identities. If these are not provided by default in the open spaces, they start fulfilling it as negative symbolic gestures of their distancing from the adults, for example - graffiti to leave their own territorial markers (Travlou, 2003). On the one hand, the city is growing without any proper urban planning policy (Ishtiaque et al., 2017) and on the other hand, children are deprived of their right to grow up in a healthy environment.

We can also observe from the songs shown in Figure 1.4 that the need of children spaces was observed and expressed by artists/activists through their creativity, in Europe, this was observed as early as 1970s and in Kathmandu, this started to appear in the turn of the second millennium, 2006. We can get the hint, that Kathmandu is in verge of losing its social structure in the last two decades especially in small neighbourhoods. Yet the task of reviving it is still challenging as urban issues are always surrounded by many vested interests.

Song – Where do the children play?	*Song – Keta keti (translated)*
Artist – Cat stevens, England	*Artist – Robin and Looza, Kathmandu*
Release date – 1970	*Release date – 2006*
Well you roll on roads over fresh green grass	Its okay lets buy our very nice cars
For your lorry loads pumping petrol gas	Let's stay happy inside a 7 storey building
I know we've come a long way	I know we have made a lot of progress
We're changing day to day	But tell me, where do our children play?
But tell me, where do the children play?	

Figure 1.4. Songs about children (Stevens, 1970; Tamang, 2006).

"In a city where the voices of the adults are also not considered, it is a challenge to bring children in the mainstream and to make their voices heard in front of the authority. It is part of a protest which can bring about a change in the social practice. Hence, this approach could be an innovation to create a better city."[5]

1.5   Transdisciplinary Approach

It is important to consider while working on urban environment - parks and open spaces, the approach shall be transdisciplinary. The various fields that must take a holistic approach to park design and management are urban planning, culture, recreation, community development, heritage, individual health and wellness, economic development, natural environment, education and transportation (Stanley, Stark, Johnston, & Smith, 2012; Ellis & Schwartz, 2016).

With millions of children living in urban environment by 2025, multi-disciplinary field have started to take interest in children's lives. The fields of social sciences, geography, planning and design have all shown interest and welcomed different perspectives into the broad field of child friendly urban environment (Carfax Publishing, 2003; Karsten & Vliet, 2006; Krishnamurthy, 2019).

Since urban planning with children is not a one-way approach, many disciplines crossing each other aid in finding the approaches that work the best. Knowles-Yánez (2005) has identified four approaches in land use planning with children – scholarly, practice, educational and rights

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[5] Researcher's self-expression

based, and how they should be synthesised to come up with a holistic and applied approach to land use planning with children.

As being regarded as a transdisciplinary matter, it provides opportunities for city stakeholders, including policy makers and city leaders, developers and investors, and built environment professionals, to take actions and also consider how progress might be measured (ARUP, 2017). Hence when the field of working with children and the field of public open spaces are combined, a transdisciplinary approach must be considered.

1.6 Rationale of the Study – from Planning to Action

As planning is not a straightforward process, contemporary planning attempts to manage complex, highly adaptive, nonlinear and unpredictable social and environmental systems, (Innes, 1999; Lessard, 1998; Skrimizea, Haniotou, & Parra, 2018) emerged through changes in social structure, public life and globalisation of everyday life (Carr et al., 1992). Thus, forcing a rethinking of the more traditional design activity of the past. Prevalent arguments on design, architecture and ecology have moved into more democratic and participatory design approach– related to global warming, smart growth new urbanism (cf. Hou, Francis, & Brightbill, 2005).

The quite often used terms in the contemporary planning is social equity, economic growth, environmental sensitivity and aesthetic appeal. All these are interlinked and support each other. Nonetheless, all of these are affected by political discernment for the planning to be successfully implemented. Based on reflection, empowerment, participation, vision and activism, as a common theme, community design and planning practices have found themselves in this new paradigm – with activist, reflective, deliberative and proactive approach. The shift from expert to local knowledge has also made this concept essential as the critical reflection in the community design has long been advocated, especially participation of children in the design of the local environment (Hou et al., 2005).

Planning especially at the community level take the form of – rational-comprehensive, incremental, transactive, communicative, advocative, equitable, radical as well as phenomenological approach (Hou et al., 2005). No matter how many theories and concepts have been developed in the past, urban planning still remains the most challenging phenomena throughout the centuries (Jacobs, 1961).

When it comes to action, Urban planning has from the past given less consideration to vulnerable groups, including children. Contrarily, Community Based Participatory Planning

(CBPP) considers the need of the community as a contemporary approach to planning. In recognition to this at the United Nations 2016 Habitat III conference on sustainable urbanisation, participants agreed upon the principle that cities should provide equal rights and opportunities for people of all ages (United Nations, 2016).

Vulnerability of children to their environment is more complex than the adults. Children playing safely and participating in cultural activities ensures cleaner and more secure public spaces. Children need places they can explore, feel safe and form attachments with others and the environment, and develop natural affection to nature. Through this exploration and connection to the outer world, children make community life more thriving, installing a sense of responsibility with freedom to play and access to green. The recent work on designing spaces 'with and for the children' all focus exploring methodologies for this to be successful (Krishnamurthy, 2019). City's resilience is directly linked to children's resilience, especially in areas of rapid unplanned development. Most important of all, considering children as active participants and taking their dynamic energy and ideas to improve the condition of the cities has been well documented. ARUP (2017) report mentions that children demonstrate considerable potential as agents of change.

While going into action, many approaches taken by the researcher has to be rethought, reanalysed as well as revised as per the context. The finding of this study hence will be a self-exploratory process. The result will give opportunities for researchers, activist, educators, urban planners and many disciplines that directly and indirectly work with children to formulate their plan. A framework for effective participation is explored in this study, as a theoretical model for an adaptive planning process which is crucial for community planning (Percy-Smith & Thomas, 2010).

1.7   Paradigm Shift

It is evident that in twenty first century, human rights and participation is given prime importance in any field – either at home, or at school, in the local neighbourhood or the city (UNHCR, 1998). The freedom of human beings to express themselves is considered crucial. Likewise, the environment they live in should also be according to their preference is the new understanding in urban planning. Public participation in decision making that affects the environment and its protection is recognised in the Aarhus Convention (UNECE, 2001).

Lynch's (1977) 'Growing up in the cities' gave start to the process of listening to children, considering their perception (Chawla, 1997). Considering children as vital yet sensitive users

of the open spaces and with the focus on child inclusive urban design, initiatives such as co-creating design with children and parents, bottom-up neighbourhood design etc. have been taken (ARUP, 2017; Krishnamurthy, 2019). Sense of ownership and responsibility arises with the community based participatory planning when it comes to open spaces such as parks, community playgrounds etc. Experiments with children's planning in the European context indicate that, if the participation process is well structured, children and young people show striking competence in the analysis of environmental problems as well as in the formulation of new ideas to tackle the issues (Laughlin & Johnson, 2011; Lynch, 1977; Talen, 1999; Hart, 1979), thus, playing a huge role to create inspiring and thriving public spaces (CABE Space and CABE Education, 2004). It not only aids in personal and intellectual growth of an individual child, but it also thrives to create a new arena for community development with synergy of ideas (Horelli, 1997).

Driskell (2002, p. 35), an urban planner, has illustrated that the benefits of young people's participation for planners and policy makers is that they will "make fully understand the needs and issues of the communities they serve", they can "educate community members on the inherent complexities and trade-offs involved in policy and development decision-making" and most of all they will "create urban environments that are more child friendly and humane." For children to gain the developmental benefits of their physical and community surroundings, urban policy and planning must be informed by real research with and by the children about their life experiences and genuine participation of the children in the planning process (Malone, 2011).

(Driskell, 2002) gives example of a slum area in south of India and stresses that though the children living there did not have basic life facilities, they were happier than the children who were living in huge apartments nearby. Even more interesting was that they felt responsible to make their place better. Children living in the slums saw the daily struggles of their parents such as bringing water for daily chores to their homes (Driskell, 2002). To be able to participate in perceiving their environment, raising a voice in the issues seen around and also proposing solutions for them is by all means a democratic process. If the children are able to do this for open spaces around them at community level, it will give rise to the process of becoming a responsible citizen (Hart, 1997).

Child participation is as an ongoing process of children's expression and active involvement in decision making at different levels in matters that concern them. It requires information-sharing

and dialogue between children and adults, based on mutual respect, and full consideration of children's views in the light of their age and maturity (Lansdown, 2011; Hart, 1997). The importance of children's participation in research or the need for them to be actively involved in designing their own spaces, whether listening to them or involving them in the process, has been realised (Lansdown, 2001; McAllister, 2008; Percy-Smith & Thomas, 2010; Malone, 2011; Derr, Chawla, & Mintzer, 2018). The challenge still remains on how to make effective participation where not just voice is heard but also the influence of it is taken in decisions (Carmona, 2018; McLeod, 2010).

United Nations (UN) made Convention on the Rights of the Children (CRC) and almost all countries in the world have adapted the convention including Nepal. It recognises children's rights to be involved in accordance to their evolving capacities, in decisions that affect them and to exercise growing responsibility for those decisions they are competent to take for themselves (Lansdown, 2011a). It identified the role of young people in shaping their own environment in Habitat Agenda (II) by stating "special attention needs to be paid to the participatory processes dealing with the shaping of cities, towns and neighbourhoods… to secure the living conditions of children and of youth and to make use of their insight, creativity and thoughts on the environment" (UN Centre for Human Settlements, 1997, p.15). With the concept of 'child friendly cities' as local governance system, Habitat II identified the wellbeing of children as the indicator of a healthy society where not only children, but all age and social groups live better (cf. Riggio, 2002).

One of the main elements of Sustainable Development Goals (SDG) is Education for Sustainable Development (ESD) with the focus on quality education. ESD focuses on transformative education where informal learning is vital for individual growth, the right to live decently and with human dignity is emphasized. For this kind of education, children need to observe their local environment and identify the issues, so that they can contribute to make a change (UNESCO, 2019a; UNESCO, 2021).

1.8   Organisation of the Dissertation

Eight chapters in this book has been organised such that, they are interlinked with each other. The study takes back and forth approach. As can be seen in Figure 1.5, some chapters have common themes, such as, Chapter one, four and six all discuss the subject matter. Chapters two and six put effort in giving philosophical and theoretical background to conduct the research, but at different level of detailing in terms of methodological approach. Chapter seven and eight

both are part of the result and conclusion of the research, but chapter seven validates the methodology developed in chapter six. Chapter five whereas is an independent unit which explores the cases similar to this research.
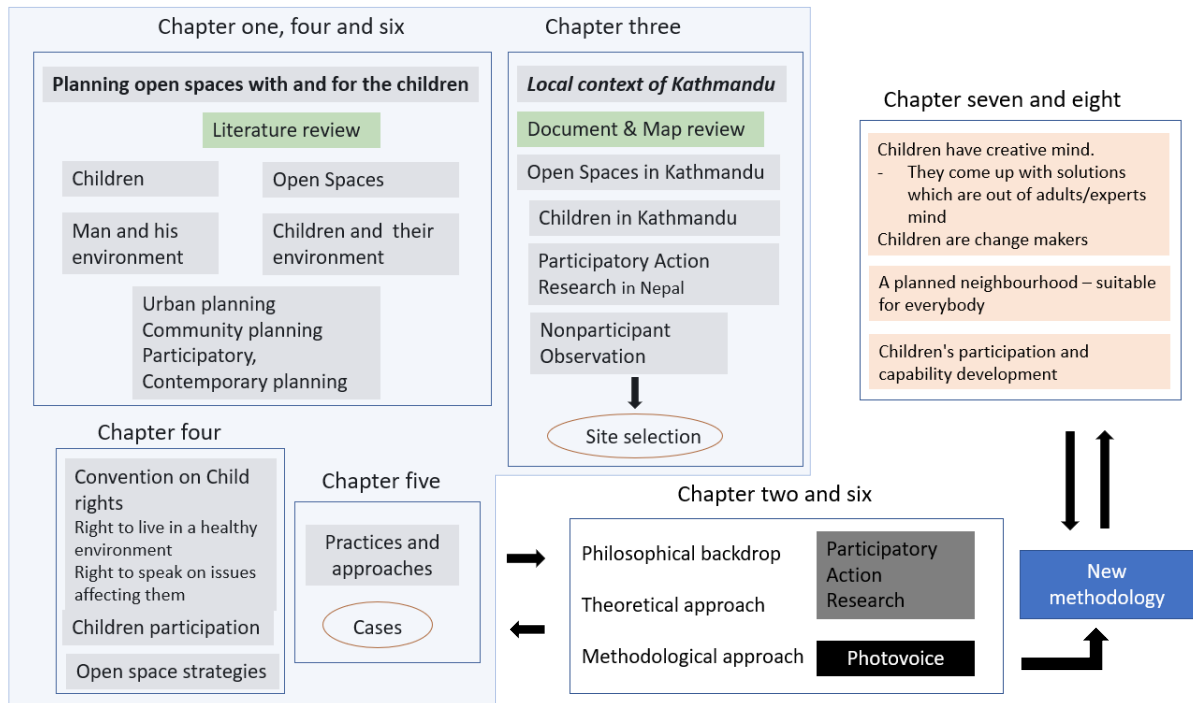
Figure 1.5. Organisation of the dissertation and distribution of chapters. The contents of the chapters highlighted inside the light-blue box is guided by the methodological approach in chapter two and guides the development of the framework in chapter six with a back-and-forth process leading to develop a new methodology, which is then validated in chapter seven.

I have briefly introduced the subject matter in Chapter 1. This chapter outlines the scope of the study as well as the field of research it will trace. The meanings of open spaces are explored and children's relation to their environment is foreseen. Open spaces are explored in the historical, global and local context. The present scenario is discussed, and the contextual lag is identified. It then states the problem and explains the rationale of the study and also what it cannot accomplish as limitation of the study. The introduction chapter gives the justification to conduct the research with an action-oriented approach, hence, Participatory Action Research will be used for this research. In Chapter 2.1, I sort out my research objective; and formulate the research questions. By taking a Participatory Action Research approach of observing, planning and taking action, this research moves towards qualitative investigation. As a social science research, the world views are explored on which this research will be inclined. Chapter 2.2 – 'Methodological Approach' explains my philosophical assumptions for this research as well as provides a general outline for my research design. The research design will help in answering the research questions step by step, chapter by chapter. Chapter 3 which is the

research area study will now go in depth in answering a part of the first research question – situation of open spaces in Kathmandu in general. In the research area chapter, the situation of open spaces in the city, the issues and policies reviews are studied to develop a comprehensive understanding of the site scenario. Document reviews as well as map study help in identifying a base for research site for further study. At this stage, research site in the city is divided into four zones.

Chapter 4, 'Reviewing concept and concise' will then explore the study, research and many projects that have been conducted around the topics mentioned in the introduction, mainly urban/community planning, children and participation. All these are viewed together and how each influence the other is observed. In the process the result obtained hence will be an interdependent process. The literature review will explore the relation of man and his environment and lead to children and their environment. Meanings of open spaces are shown and analysed; the types of open spaces considered in the research is defined. Children's role in open spaces planning is studied through different literature, participation is at the core of such process and then different kind of participation is studied. Children as children, children as vulnerable group and then children as experts are the conditions explored in this part of the study so as to understand their capability as well as their probable influence or contribution to this research. Here, relation between United Nations' Convention on Right of the Children (UNCRC) and the Open Spaces Strategies that are developed globally is explored. The combination of this could bring a new model for working with the children and contribute to urban/community planning is the belief of this research and hence is emphasized in this chapter. To explore if these practices have been done in the global scenario and how they are done, more study is done. These are presented in Chapter 5 as case studies to understand how the process of participatory planning works. Each case is looked upon in detail and the result of all is summarised. After this chapter, it was clear that there is a need to find a comprehensive model with which Participatory Action Research at the research site is possible. Hence Chapter 6 'Developing a Model' justifies it. Firstly, it explores the philosophical and theoretical background and then it explores the participatory approach to the research. Both of these ideas are gelled in and a methodological framework is developed to carry forward the research. The methodological approach developed, and the overall model of Plan-Act-Study cycle is verified. A powerful tool Photovoice is used which supports the PAR process. The PAR cycle is considered as a continuous loop and thus requiring series of plan and action. While such actions are taking place, it is important to Monitor, Evaluate and Reflect (MER) upon the process,

hence MER is added to the cycle to make it a comprehensive model. Then in Chapter 7, this methodology is applied with site and context specific approach. The result obtained is not physically separated in parts, but the idea is seen in the research finding that the result is obtained through the children's perspective as well as the researcher's analysis. First of all, for further study, specific zones and neighbourhood selection is done and explained methodologically. Out of four neighbourhoods previously identified in Chapter 3, two neighbourhoods are selected for working with children. Then the PAR with children starts. More specifically, a participatory tool which has been found effective in working with children has been selected for the further process – Photovoice. Chapter 7 also discusses the process and the findings. Hence a methodology that was developed in Chapter 6 is tried and tested in Chapter 7 - 'Applying Methodology'. Study-plan-act and then monitoring-evaluation-reflection approach is taken to justify the process. This then finally brings forward a new methodology on working and researching with the children, to bring about a change in the society, in this case in the 'open spaces'. In the process children's capabilities and development is analysed, thus setting the base for working with children to make them aware and responsible towards their environment. The methodology developed is not exclusive to urban planning and can be used in various fields as has been justified with transdisciplinary approach. The final Chapter 8 summarises the findings once again and concludes the dissertation.

1.9   Special Note – Covid-19 Pandemic

After I had conducted the action research and I wanted to do a final exhibition at the start of the year of 2019, the Covid-19 pandemic started to surge, and Kathmandu was no exception. While I stayed in Nepal for more than a year, though my initial plan was to stay for three months, I realised that the pandemic has further divided up our society. Social media was the witness of this discrimination. People with their own houses and gardens were staying comfortably at home and urging for more lockdowns while the people who had migrated to the city and were staying in rents, went back to their villages. But there were majority of those, permanently residing in Kathmandu in shared apartments and flats. For them going outside the house was the only option to get some fresh air. During the lockdown, this was not allowed. Especially hampered were the children who needed to go outside and play. Hence, from this self-observation also, it could be seen how important the green open spaces are for the most vulnerable ones in the community. And by giving them voices, others can see the actual situation.

2 Research Objective and Methodological Approach

To start with, this research is a process. Being a process, the methodology will be developed throughout this research back and forth and it had started long before the research was started. The observation had started as part of Growing Up in Kathmandu (as I was living here all my childhood). Chapter 1 has convinced on this regard that the situation of open spaces in the city is not good, and the children are the most impacted ones because of this. But we do not know the real scenario unless we ask the people most affected by it. Hence this research believes in the philosophy that people who are living in that place have full knowledge about the area, or at least, can express fully what they think about their environment.

Children are more observant than their adult counterparts, hence children should be provided with environments where they can express themselves fully, methods and techniques should be used so that their involvement becomes meaningful. The real picture of the community as seen from their (children) perspective is taken as the basis for starting the research. Children's participation has been realised in the global scenario and methods have been applied, which will be demonstrated more in the Chapter 4 and 5 - 'Reviewing Concepts and Concise' as well as 'Case Study', simultaneously. A comprehensive methodology on working with the children will be developed gradually as it will be part of the finding of this research. To convincingly make it possible, the following arguments are illustrated. How the whole research is formulated and what are the philosophical assumptions will be discussed in this chapter.

2.1 Research Objective

The aim of this research is to develop methodology to involve children in the process of managing open spaces in their local environment. It will create an opportunity to develop a concept of child friendly spaces in an urban setting together with children in the planning process as well as management. It aims also to bring about a social change in the local environment with children as catalyst for the change. Hence, the objective of this research is to:

- Document - <u>Situation of open spaces</u> – researcher's observation
- Understand - <u>children's perception of these open spaces</u> – Participatory Action Research
- Advocate - <u>children's participation</u> – identifying issues, finding solutions, taking action
- Build up a process - <u>developing/planning an open space with the children</u> – researcher's observation

Based on above mentioned objectives, following questions are formulated.

2.1.1 Research Question

1. What is the situation of open spaces in Kathmandu city?
2. How do children perceive their local environment with respect to open spaces?
3. What could be an effective model to realise children's genuine participation to bring about a change in the situation of open spaces?

In the result section, it will be clearly mentioned how each research question will be answered. The first question will be partially answered in Chapter 3 (Research Area) and partially in Chapter 7 (Applying Methodology). The third research question however will be answered in Chapter 6 (Developing a Methodology), it will be tested in Chapter 7 for the contextual analysis. The validation of the methodology will be backed up with literature review, case studies and on-site study. The second question is the core of this research, as it involves working/planning/researching with the children.

2.1.2 Research Hypothesis

Based on the argumentation in the introduction, the hypothesis for this research are as follows:

1. The situation of Open Spaces in Kathmandu is poor. Children are not getting enough outdoor explorations. Children are not considered/consulted while it comes to the situation of their environment.
2. Children are able to observe, understand and even solve issues related to open spaces. They can raise voice for the same. A participatory model to engage children in such process could help bring about a change in the society – tangible and intangible.
3. It is a process and not a project to start and end. Thus, needing continuation. The result could be that we have better urban/community open spaces.

2.1.3 Limitation of the Study

What is being tried here to achieve is not a perfect city nor planning with a standard frame of reference, but the idea is to engage children and young people in understanding their neighbourhood. To help them see through different approaches to what is happening around them and probably develop solutions to better manage their area. This democratic process of planning and managing their own neighbourhood might give a new perspective to the city planners. The goal here is not to include all the issues that may matter in the management of open space but to try to find possibilities on how to address the existing issues/how to manage

them, to bring out critical thinking and reflect upon the environment children are living in and to approach for a change.

Instead of concentrating on standard needs, this research will focus more on the intangible aspects of the design. Here, we will not talk about the width of the road, equipment in the playgrounds, or the provision of public transportation; rather, the focus will be on how children perceive their surroundings and what they want to change or make better. Also, through the research, the researcher not only considers the contextual need of the children but gives them a voice and an opportunity to control their environment. What could be the challenges encountered, and what is really in the hand of the children when it comes to community planning, with special regard to public open spaces will be explored.

In this kind of research, though the university supports the researcher, the researcher has to manage many other expenses at the site. The exhibitions and workshops would take a whole day; hence the children as well as the people helping with the exhibition needed to be provided with some refreshments. In addition to that, printing costs, stationary items etc. also needed fund. In some cases, even venue for the events- meetings and exhibitions, needs to be rented. In this research, the programs took place in school premises. Nonetheless, the researcher has to bear in mind of such expenses and pre plan before starting the process.

2.2   Methodological Approach

2.2.1   Participatory Action Research (PAR)

The qualitative researcher has to generate methods and analyse patterns responsibly to create methodologically convincing stories. Selecting a specific set of methods directly impacts the data collection and the results gained from them, especially in qualitative research (Oxford University, 2018; Williams, 2007). As the topic of the thesis is 'Planning Open Spaces with and for the Children', the approach that will be taken is congruent with the contemporary approach to planning and in line with the rights of the children, as already discussed. An action-oriented approach is needed for this research, hence starts Participatory Action Research.

Participatory Action Research (PAR) is a method that unites research with action. It has been used in many fields (education, organisation, community development) and hence has been given different terminology depending upon the study undertaken. The particular focus of this study is action research for community development (Selener, 1997).

For Rahman (1993, p. 82), PAR is a type of research whose basic proposition is "the ideology that those who are currently poor and oppressed will progressively transform their environment by their own praxis. In this process others may play a catalytic or supportive role but will not dominate."

The concept of planning open spaces with and for the children is considered to be a democratic approach. The engagement of people in a democratic knowledge production process is at the core of participation (Bradbury & Reason, 2003; Chevalier & Buckles, 2019; Kemmis & McTaggart, 2007), and PAR exclusively supports these processes. It aims to distribute equal distribution of power in terms of decision making to enhance empowerment, social justice and equity, collaborative relationships, learning and respect towards diversity (Strydom & Puren, 2014).

2.2.2 Participatory Action Research Origins

Kurt Lewin, 1946 coined the term 'action research' with the belief that theory would be developed and tested by practical interventions and actions. The interplay between the researcher and the participations with multiple action and reflection was his main concern (Kindon, Pain, & Kesby, 2007).

In around 1960s and 70s, Brazilian educator Freire (1970) developed community-based research processes to support people's participation in knowledge generation and social transformation. The awareness of the poor and the marginalised groups must be awakened through conscientization about the forces affecting their lives and then act as a catalyst themselves to inform their political action. His ideas were connected with the dissatisfaction the majority world (Africa, Asia, Latin America, Caribbean) was facing with colonisation, modernistic development intervention and positivistic research paradigms practiced by university-based researchers. This provided alternative institutions and procedures for research that could be emancipatory and bring a radical social change (cf. Kindon et al., 2007).

In 1980s, this concept was widely acknowledged in community development and international development contexts, particularly involving people as agents for their own development. By the 1990s, PAR was more popular within the minority world (United States, Canada, Australia and Europe) institutions which blended with action research and critical social science – Action Research, Participatory Action Research and Action learning are the terms commonly used (cf. Kindon et al., 2007).

2.2.3   Background

Social science research is central in a reality-based community. It relies on the people carefully studying experiences, events and facts in social reality. The social-cultural sciences (such as anthropology, economics, human geography, psychology, political science and sociology) involve the study of human social cultural life – beliefs, behaviours, relationships, interactions, institutions and likewise. Social science knowledge is applied to practical concerns in related applied areas such as counselling, criminal justice, education, management, marketing, public administration, public health, social work and urban planning. Sometimes referred to as 'soft sciences' because of the subject matter – human social life which is highly fluid, formidable to observe, and difficult to measure precisely (Neuman, 2014).

In qualitative research, presupposition or hypotheses do not shape the analysis, rather the data collected help in the generation of hypotheses and development of theories in the phase of analysis (Dresing, Pehl, & Schmieder, 2015). In qualitative research, much focus is given to individual's meaning by living in an environment and experiencing it which provides a broader understanding and even in-depth knowledge into the complex human behaviours (Lincoln, 1992; Mason, 2006). Methodological criteria are not enough but the process that shows a flexibility of approach, adapts to the specific communities and considers the process, result and ethics should be prioritised. Hence, a researcher's reflexibility is also an important aspect of a qualitative analysis (Horelli, 1997).

In this research, I will put a glimpse upon – post positivism, constructivism, social constructivism and critical theory, along with interpretative and hermeneutical approach. All of these are core to action research and working with the participants of the research as coresearchers.

Martineau (1989) argued that research with human beings and their social interactions require an approach that could find a way into their hearts and souls, which is an alien concept for natural scientists. She believed that social researchers needed to possess 'sympathy' for the people or cultural groups they were studying that would enable them to gain a deeper understanding of the matters that were most important to them. This emotional intelligence - the ability to connect with another person's thoughts and feelings on the basis of a shared sense of humanity should be at the core of a researcher's skills (Martineau, 1989). Thus, supporting the post positivism approach that a researcher's prior knowledge and sensitivity and understanding of the topic of study is unavoidable preconception. But also, carefulness is

needed to limit it to the methods and not the outcome (Fox, 2008). I do not hold onto my own research findings but take my participants as fellow researchers, hence, recognising their knowledge and their subjective understating into consideration.

"Constructivism is the recognition that reality is a product of human intelligence interacting with experience in the real world. As soon as you include human mental activity in the process of knowing reality, you have accepted constructivism" (Elkind, 2005, p. 334).

Taking the concept of constructivism that the knowledge can be generated by various methods and the reality is subjective as it is a construct of human mind, the research methodologies used in this research takes a pragmatic approach but relies on the ground of constructivism - knowledge generated through experience and in a particular context (Dudovskiy, 2017). As the reality is socially constructed, there are knowledges created through mediated human experience of history, culture and language (Berger & Luckmann, 1966). Each observer will see its environment differently. Hence, there are numerous realities based on subjective practice and context (cf. MacDonald, 2012).

Social constructivism and interpretivism share the common ground of social science research that meaning is created and negotiated by human actors and the belief in understanding lived experience. Social constructivism places emphasis on everyday interactions, social practices people engage in as focus of enquiry, considering the knowing not independently, but as a social construct. Both these theories also share the idea of society existing both as objective and subjective reality (Andrews, 2012).

Interpretive social science was a movement associated with German sociologist Max Weber (1864-1920) and German philosopher Wilhelm Dilthey (1833-1911) (cf. Rickman, 1979). Interpretivism studies focus on meaning and memploy flexibility of using multiple methods in order to reflect different aspects of the issue. It is important for the researcher as a social actor to appreciate differences between people. Dilthey argued that there were two basic types of science: *Naturwissenschaft* – abstract explanation and *Geisteswissenschaft* – empathetic understanding or 'verstehen', of the everyday lived experience of people in specific historical settings (cf. Rickman, 1979).

Weber argued that the social science should study social action with a purpose. He also embraced 'verstehen' and felt that a person's personal reasons and motives must be understood in order to comprehend his/her internal feeling as the former is shaped by the latter and it guides a person to act in particular ways. To support this interpretative exploration, Dilthey developed

alongside other scholars the intellectual tool of "hermeneutics" (cf. Rickman, 1979). This method was historically used to understand and interpret texts and Dilthey expanded it to include any form of meaningful human action. According to him, hermeneutic interpretation involved placing oneself in the position of the creator of an expression – in order to re-experience the original feelings of thoughts which gave rise to their action. As part of his work on hermeneutics, Dithey developed an important concept to the interpretative philosophy, the 'hermeneutic circle'.

The main idea of this concept is that the interpretation of meaning is always a circular process, that is, the interpretation of the part always depends on the interpretation of the whole and vice versa (Nelson, 2008). And this iterative process of interpretation brings deeper and deeper levels of understanding. While researching with children, a hermeneutic approach should be taken to analyse the qualitative data. This gives a chance to look at the issues in whole to part – from researcher's scientific background and also part to whole – children's perspective. The hermeneutic cycle helps in observing closely to the data and thus interpreting it again and again (Rickman, 1979).

"Phenomenology – shows what range of experiences are possible in the world that people live, how they can be described, and how language has ability to communicate these experiences to others in their richness" (cf. Plunkett, Leipert, & Ray, 2012, p. 157). Interpretive phenomenological analysis is concerned with trying to understand lived experiences and with how participants themselves make sense of their experiences. It is important that the researcher does not overpower his/her role in the research. Kellett (2005) argues that a genuine insider perspective can only be obtained by empowering children as the researchers in their own right (Kellett, 2005). Interpretative phenomenological approach takes the form of hermeneutics approach where the researcher and the participants work together to make sense of the data (Smith & Osborn, 2003). Hence justifying researching with the children.

Coming back to Dilthey, consciousness is important part of human meaning making. And social science requires a different and distinct methodology and philosophy to interpret the meanings. Critical theory also supports the concept of freeing humans from domination and oppression which is caused by underlying assumptions in social life. Social science methods should hence remove such 'false consciousness' and lead people towards true democracy (Horkheimer, 1931).

2.2.4 Important tools of Qualitative Research

Time

The preparation, conduction and transcription usually take 10 to 15 times the duration of the actual interview or discussion. The time for subsequent analysis though depends upon many factors, a minimum of 60 times the time required for the actual discussion for a simple and descriptive qualitative study (cf. Dresing et al., 2015). The time calculation includes all the relevant steps: development of research questions, development and testing of questions guide, conducting interviews, transcriptions, case-based analysis, category-based analysis and completion of study report (cf. Dresing et al., 2015).

Writing

For any qualitative research, writing is a vital part of the analysis and is a continual process during the whole research – from site observation, research planning, keeping notes etc. Hence it is a good idea to start the writing at a very early stage rather than waiting for what is often called a 'write-up' stage. Writing is thinking and analysis in a very real sense, writing up the notes and writing the final narrative account of the work are, especially in qualitative research, central parts of the analysis itself (Braun & Clarke, 2006; Neuman, 2014).

Diagramming

Diagrams are like road maps in research process, they enable navigation within a conceptual domain. Such maps help the research designer to keep track of his/her work. The changes in the data and the process flow are outlined in the map and hence the overall research becomes comprehensive (Wang, 2007).

2.3 Research Design Approach

Considering the above-mentioned analytical theories and tools, I develop my methodologies accordingly. First, I take the role of a researcher and ethnographic observer thoroughly analysing the available literature and site observation, then I make a plan on working with the children, where I rely completely on the data generated by the children, but also be an observant to analyse the data and the whole process. I also take consideration of philosophical and theoretical backdrops that shape up the research (explained in detail in Chapter 6).

In this research, the main research design focuses on Participatory Action Research, along with ethnographic observation as well as thematic analysis. Qualitative data come in a vast range of

forms – photos, maps, open ended interviews, group discussions, observation, documents and so on. Most action research shares five characteristics:

- The people who are studied are active participants in the research process.
- The study incorporates the popular knowledge and concerns of ordinary people.
- The study examines power relations and documents social inequality or injustice.
- Study findings are shared to raise the awareness and empower ordinary people.
- The research is tied directly to social-political action and achieving social goals.

Specifically, Participatory Action Research (PAR) is a subtype of action research that emphasizes democratising the knowledge-creation process, bringing out injustices, highlighting social inequality and conflict, and engaging in collective action to improve conditions. It assumes that political knowledge emerges from participating in research. PAR is action research in which the research participants actively help design and conduct the research study (MacDonald, 2012).

With the key belief that knowledge grows out of directly experiencing social-political activism, the research participants engage in direct action thus become more informed and empowered. The research participants take an active role in formulating, designing and carrying out the research, cogenerating findings with professional researchers in a collaborative process. They are also involved in problem definition and study implementation. The trained researcher acts as a consultant or collaborator who assists and provides expertise in study design, data gathering as well as parts of data analysis/interpretation and presentation. An action researcher needs to have an in-depth knowledge of proper research procedures and very carefully document study methods. While talking about PAR, the process demands a chance for alteration and improvisation as it is dependent on the existing scenario of the respective site and context (Horelli, 1997).

Action research prefers a politically and socially engaging practice (Chandler & Torbert, 2003) rather than an objective and value-free approach of learning, here, the primary goal is to facilitate social change. Brydon-Miller et al (2003) say that action research is not simply about 'doing good' but about 'doing things well' (Brydon-Miller, Greenwood, & Maguire, 2003). Core participation with collaborative relationships with the stakeholders is what makes action research competent, a form of cooperative inquiry (Reason & Bradbury, 2001).

The concreteness and situated approach of an action research helps to identify and focus on the issues faced by people in their daily lives. Mcniff and Whitehead (2006) emphasise on the

practicality of knowledge. Action research hence is valuable as it combines theory and practice, research and action. Knowledge begins with practice and theory is evolved through practice. And action research is a way of learning about practice and learning from the experience of practice. Action research is problem-centred, participant-driver and action-oriented (McNiff & Whitehead, 2006).

Action research is not a one-way straightforward process and there is no guarantee of a good result. It is such as the positivistic approach (cf. Adelman, 1993), though the repetitive process of analysing the data may tempt the researcher to assume it as a linear process (Yee, 2007). The researcher as an expert should limit his/her role in the process so as to facilitate and not to overshadow. One should know the timing and need of playing a double role as an agent or a scientist (Horelli, 1997). As an ethnographer, the responsibility of extracting useful information is challenging, it depends upon the depth in which he/she can act and react. Ethnography can be an important approach when researching with children, considered that children are the actors and interpreters of their own world. This gives an opportunity for children to express their views to others (Milstein, 2010). Researcher, on the other hand, can immerse themselves in the everyday life of the group or society to be explained in order to understand the culture 'from the inside', typically uses some combination of participant observation, research diaries and interviewing and provides thick description of the contextualised behaviour (Geertz, 1972).

A common framework for PAR encompasses a "cyclical process of fact finding, action, reflection, leading to further inquiry and action for change." (Minkler, 2000, p. 191). The four components of PAR are participation, action, research, and social change for social justice (Strydom & Puren, 2014).

An ideal action research process involves a series of continuous cycles comprised of the following activities: (Selener, 1997)

1. *Planning* a course of action to improve a given practice or situation;
2. *Acting* to implement the plan;
3. *Observing* the effects of an action taken in the context and under the practical conditions in which it occurred; and
4. *Reflecting* on these effects as a basis for further planning, subsequent action, and so on, through a succession of cycles.

The cycle is formed through observation, then planning, taking action. During all these processes, reflection is taking place continuously (see Figure 2.1). Being a cyclic process, there

could be more than one action taken and the cycle does not have a start and an end. For example, in one instance, it may be started with planning phase, on the other instance, one may start with the observation phase.

As this research focuses on urban planning, looking at the contemporary practice of landscape/urban design, the domains of skills especially critical to democratic landscape design are (Hester, 2005):

- Representing people TAKE ACTION

- Exchanging professional knowledge and local wisdom spatially PLAN ACTION

- Co-authoring design TAKE ACTION

- Empowering people to represent themselves TAKE ACTION

- Visualising deep values – community, stewardship, fairness and distinctive place OBSERVE & IDENTIFY
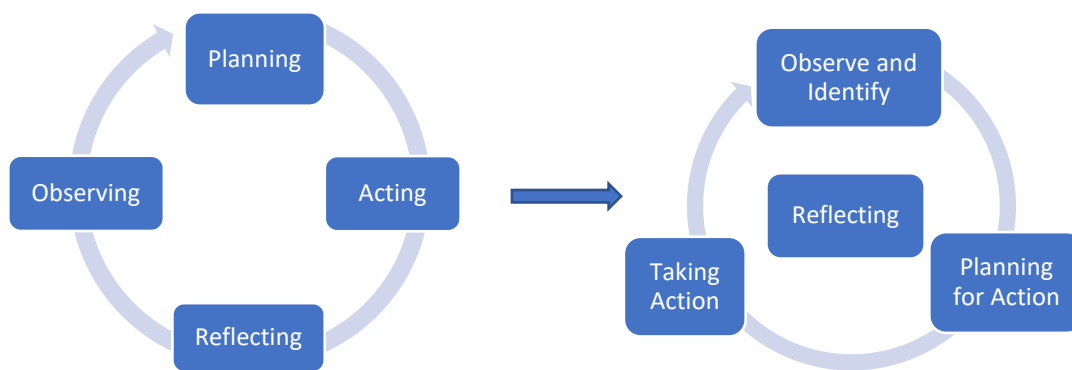
Figure 2.1. Participatory Action Research (PAR) and Democratic landscape design model combined.

Hence, contemporary practice of landscape/urban design further justifies the use of Participatory Action Research with the children. The PAR model shown in Figure 2.1 is conceptualised in Figure 2.2 as per the context of this research. The distribution of the chapters shows the flow of study/observe-plan-act processes as elaborated below.
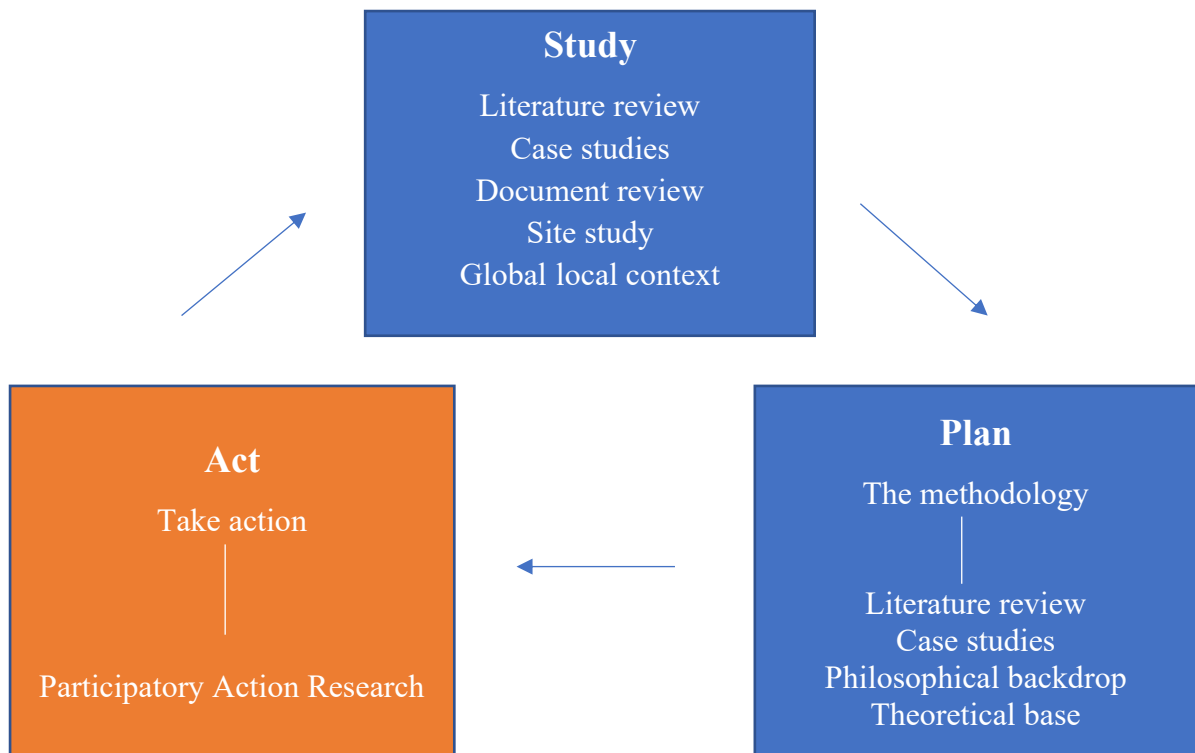
Figure 2.2. Developing a Model: Research Design Methodology.

Chapters one and three; and chapters four and five – The Case, Research Area, Reviewing Concepts and Concise, and Case Study helped in building up this research, hence they were partly the 'Study Phase' as well as partly the 'Planning Phase' of this research as a whole. Chapter six is solely the 'Planning Phase' where a methodology of working with the children is developed. Chapter seven is partly the 'Act Phase' where the findings of the part of Researching with the Children and part of the analysis of the whole process is shown.

3 Research Area

Kathmandu city is the study area in this research. The problem and existing scenario of the research area was explored in Chapter 1 as 'The Case'. To understand the scenario and built up of this city also in context of its surrounding, a brief introduction is provided below.

3.1 Introduction to Kathmandu
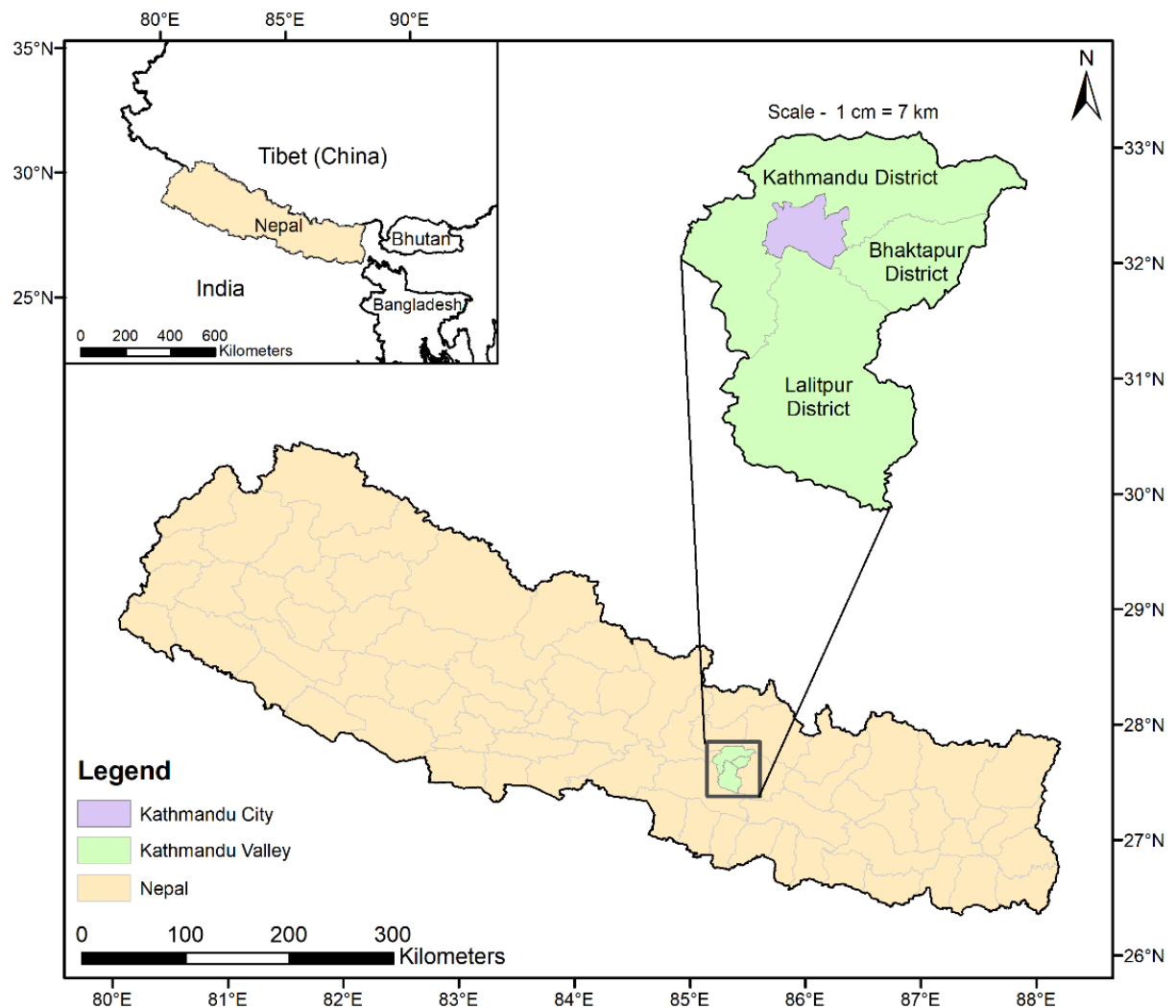
Figure 3.1. Map showing location of study area, Kathmandu City, in Kathmandu Valley and Nepal. Inset shows the location of Nepal in the region.

Kathmandu valley comprises of the three major cities: Kathmandu, Lalitpur and Bhaktapur. Though Kathmandu is the capital city of Nepal, it is mostly called the valley not segregating it from the other two cities. The valley is enriched with most of the Nepal's ethnic groups, but the Newars are the indigenous inhabitants (UNESCO, 2015). It is the political, commercial and cultural centre for Nepal which showcases a rich culture, art and tradition, especially that of the Newari Settlement (Pant & Funo, 2007).

3.1.1 Geographical Features and Historical Background

Nepal is characterized by multidimensional topography, geology and climate with diverse land uses and livelihood patterns. With 77 % of land area being mountains and hilly, it is known as the Himalayan region of the world, 23% of the area is flat, called Terai. The lowest elevation of the country therefore is above 64m from the sea level and the highest elevation being the highest peak in the world Mount Everest which is 8848m above sea level. This high range of difference is within the span of 200 km from terai (south) to mountain region (north) (Shukla, Timilsina, & Jha, 2012).

The Kathmandu Valley is situated in the central region of Nepal, at an average elevation of 1350 metres above sea level. As per a myth, the Kathmandu valley was a lake (also been confirmed by geological research) and it was drained out by a Chinese saint, Manjushree. He cut through the ridge of *Chobar* which lies on the south of Kathmandu valley and drained all the water making the valley available for habitation (cf. Thapa, Murayama, & Ale, 2008). The sandy gravel and gravel soil including lacustrine soil is found in this area. It is mainly formed by the deposited materials in the lake thus, a fertile land (Shukla, Timilsina, & Jha, 2012). Bagmati River flows through the Kathmandu Valley and it is the most significant sacred river for the city. The valley's location is the main reason for its economic and cultural development as it served for hundreds of years as a gathering place for the traders. The first aeroplane arrived in the valley only in 1949. The valley became a centre for cultural exchange as it was a point of intersection of trans-Himalaya trade routes (cf. Weiler, 2009).
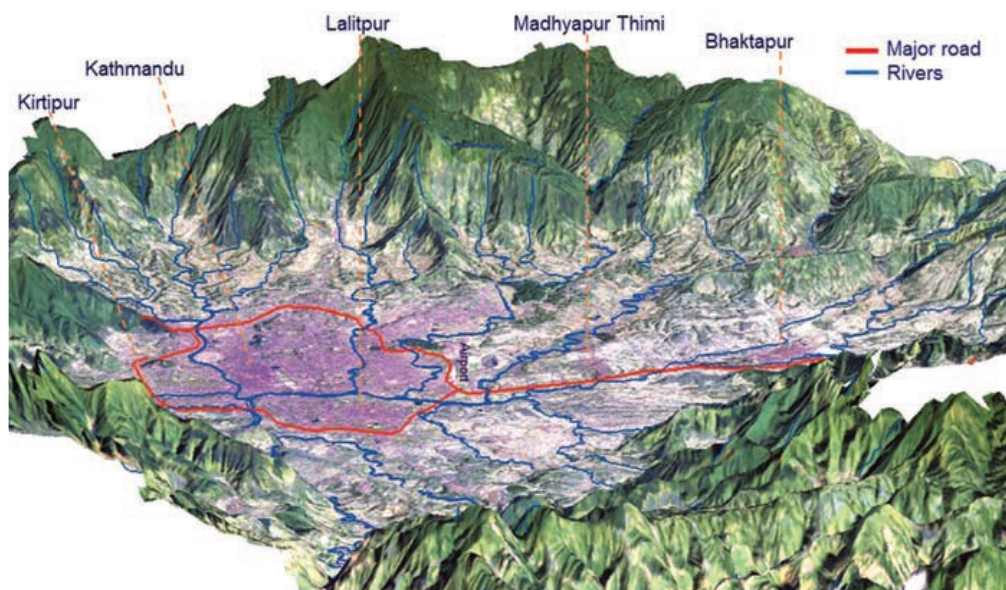
Figure 3.2. Three-dimensional map of Kathmandu Valley showing the central urban region inside the red ring-road (Thapa & Murayama, 2010).

The valley's flat area is densely populated, with more than 6,000 persons/km^2. The population density is lower at greater distance from the city core, these are the area at higher elevation and are composed mostly of villages. The fringes adjacent to urban areas have faced rapid population growth. The phenomenon of population increase in the valley can be seen in the figure below. From last two decades there has been a drastic change in the population of the valley.
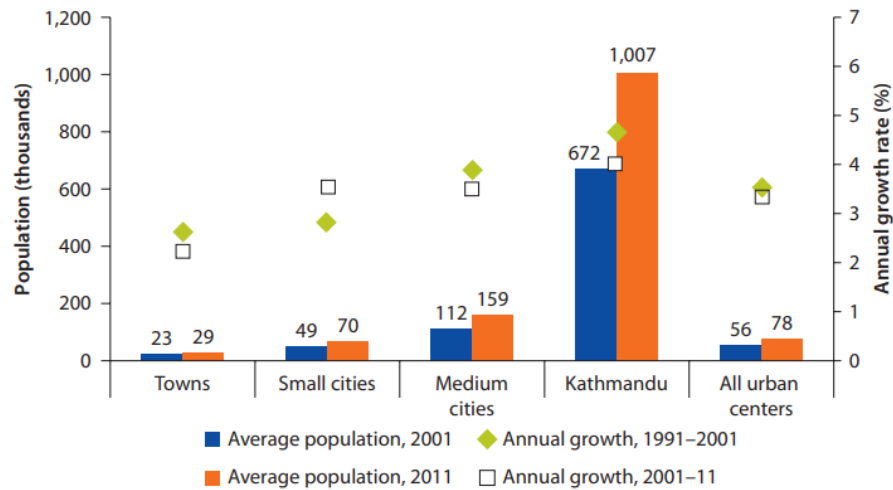
Figure 3.3. Growth of population in Kathmandu Valley since last two decades (c.f. Muzzini & Aparicio, 2013).

In the above figure, the population of Kathmandu is around 1 million in 2011. The latest census of 2021 also shows the population of Kathmandu to be around 1 million. The overall population growth rate in the country has however decreased (Central Bureau of Statistics, 2021).

The traditional settlements of the Kathmandu Valley date back to pre-historic era. The three palaces in the three main cities, Kathmandu, Bhaktapur and Lalitpur, the squares and temples around them and the ancient settlements surrounding them gives the valley its identity with a great variety of cultural heritage sites and urban elements (Thapa et al., 2008). Example of these squares are show in Figure 3.4.

Figure 3.4. The three Durbar (Palace) Squares of the Valley. From left: Basantapur (Kathmandu), Patan (Lalitpur) and Bhaktapur (Thapa et al., 2008).

Kathmandu Valley's indigenous settlements built by the Newars are considered as the most beautiful indigenous settlements in the world comprising of towns, villages and houses. The perfection of urban design and spaces, fine craftmanship of the buildings and monuments are unique to Kathmandu valley and Newar people, showcasing an artistic imagination and a social understanding (cf. Shrestha, 1981).

3.1.2 Hierarchy of Open Spaces

The towns of Kathmandu Valley have traditionally been built as compact settlements that encouraged walking and the use of public open space. The central area of the settlements were the open spaces in the form of squares and all the major routes converged here. The secondary roads and narrow alleys passed through compact buildings and these settlements also had smaller open spaces in the form of quadrangles. This shows that open

Figure 3.5. A typical Cluster in Patan: Bubahal Cluster (Pant & Funo, 2007).

spaces had high importance in the built up of the city form, as shown in Figure 3.5 (Clean Air Network Nepal, 2013; Pant & Funo, 2007).

These quadrangles or the courtyards were responsible for the social interaction through daily activities such as drying grains in summer, worshipping, as well as were safe places for the children to play. These elements of urban forms gave both functional and aesthetic purposes such as the temples, Pati (public rest house), water well and Dhungedhara (stone waterspouts), Stupa and Chaitya (Buddhist shrines) and Dabali (an elevated platform) (Chitrakar, 2006). The raised platforms at the centre also served as markets as well as announcement zones for events. Ghats (cremation sites) were located at the outside of settlements near riverbanks. For the Newars[6], a house and a settlement are not only their place of residence but also sacred places where social and spiritual functions are performed (Shrestha, 1981).

The compact planning then gave opportunity for abundance of farming around the periphery of the city (cf. Vaidya, 2011). Kathmandu's now city land was historically a highly productive agricultural land. The major crops are still grown in the city fringes. A large variety of

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[6] Indigenous inhabitants of Kathmandu valley.

vegetables are grown throughout the year in the periphery of the city and they provide fresh products to the city dwellers (Thapa et al., 2008), a lot of which, has been converted into building plots, mostly haphazardly.

Open Spaces were used for variety of functions in the past and they were able to form a social agglomeration, fulfilling the same function and also having uniqueness of their own. The diversity of these spaces made the neighbourhood vibrant and sustainable.

"Where are the open spaces?"[7]

3.1.3   Contemporary Scenario

In the recent years, rapid and unplanned growth has led to huge urban sprawl with limited public open space and the modern rational planning approach has never benefited these newer urban areas (Adhikari, 1998; Shrestha, 2010). Recently, Kathmandu valley shares the characteristics with many other rapidly urbanising cities in the region (Asia, South Asia) – mainly – unregulated urban development, inadequate enforcement of the land policies, poorly maintained city infrastructures, the massive influx of people from surrounding rural areas and hinterlands, land speculation, excessive pressure of commercial activities, and gaps in supply and demand for basic services (Ishtiaque et al., 2017).

Chitrakar (2006; 2016) has written about haphazard growth of built environment in the valley which has a huge impact on the public realm of open spaces. He also argues in many of his papers about how the traditional open space planning concept of the valley could be used in the present context to solve the problem (Chitrakar, 2006; Chitrakar, 2016; Chitrakar et al., 2017).

As the city core cannot provide settlement for the growing population, the expansion takes in the form of congestion within the city in a peripheral land. The open space that existed and provided the residents with food gardens, grasslands are gone in many places and they are overtaken by new urban spaces such as bus park, shopping centres, squatter settlements, new planned and unplanned residential colonies and industrial buildings. The streets which were used by pedestrians and chariots as networks for interaction of societies and exhibition of public life have now become simplified tools for transportation, thus losing the value of social life (Kathmandu Metropolitan City/World Bank, 2001; Chitrakar et al., 2017; Rai, 2008).

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[7] Researcher's self-expression

Now a days, most of the settlement patterns in Kathmandu have varying built forms. The types of zones created through planning as well as haphazard development provides a dynamic city built in terms of its function as well as character. The guidelines made by the government to manage these spaces, though existent, does not fulfil the requirement. This is evident in the ever-growing city form and lack of open spaces for the public use (Shrestha, 2010). This is contrary to the need of open spaces for a healthy living as the accessibility to green open spaces has been ideologically linked with positive impact to human health (Stanley et al., 2012).

Community living culture is diminishing, and more privatised residence are taking shape which shows discontinuity in traditional structure, destruction of community spaces and more risk for future vulnerabilities. The new settlements sprawling towards the less dense areas have lesser provision for public open spaces, giving less chance for residents to get involved in communal activities and social interaction (Chitrakar, 2016).

3.2 Policy Review

The summary provided below is from a report prepared by Ministry of Urban Development (MoUD), Government of Nepal, as a strategic plan to national urban development (MoUD, 2017). In bylaws of Kathmandu valley, community open space is reserved as an integral part of any land measuring 0.25 hectare or more for the use of the community. Existing by-laws have the following provision for community open space for planned residential zone (Resource Centre for Primary Health Care, 2016).

a. For 5 to 10 ropanies[8] (0.25 to 0.5 hectares) 5 % of total land area
b. For 10 to 25 ropanies (0.5 to 1.27 hectares) 4% of total land area
c. For 25 to 100 ropanies (1.27 to 5 hectares) 3.5% of total land area
d. For >100 ropanies (>5 hectares) 2.5% of total land areas

Nonetheless, there is a lack of comprehensive zoning regulations, and the urban sprawl is at expense of productive agricultural land. Hence, the evolving urban form is becoming increasingly disorganised with incompatible land use pattern and declining level of amenities and neighbourhood environment (MoUD, 2017a). There are some regulations for the new planned residential development also focusing on basic amenities and provision for open spaces,but they are not adequate. The peripheral housings and some high-class residences developing throughout the city also do not have sufficient basic amenities like proper sanitation,

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[8] Land area calculation unit of Kathmandu, Nepal (1 hectare = 19.66 ropani)

drinking water, waste management etc (Thapa et al., 2008; Vaidya, 2011). The number of open spaces ranges from 2.5 to 5 percent of total developed area without basic amenities which makes them unfriendly and insufficient to fulfil the need of the residents (Chitrakar et al., 2017). The housing deficit is growing, and the percentage of squatter settlements are increasing (MoUD, 2017a).

Kathmandu Valley Development Authority (KVDA), an institution prioritised to prepare an integrated physical development plan for Kathmandu valley, has not been able to prepare urban planning and design guidelines for the valley's newly developed areas (Shrestha, 2010). Hence, the public spaces in these areas are highly neglected. Lack of mechanism to develop adequate and responsive public spaces in the new neighbourhoods is seen prominently.

The most dominant form of land tenureship in Nepal is private land. 90% of the houses are built informally following the traditional practice of owner-built housing development (cf. Shrestha, 2010). Urban land market is largely unregulated and informal, with no formal land information system. The potential buyers and sellers meet mainly through mediators and incrementally fragment and sell land. Land is seen as an alternative investment and are kept fallow for a long period of time for speculative purposes (MoUD, 2017b).

The government itself elaborates on the importance of open spaces in its urban development report. It explains the standard practices of open spaces and parks should be implemented and how they can contribute to the larger population by making them inclusive. But it also admits that these issues have largely remained ignored in both policy discourse as well as in the practice of urban development (MoUD, 2017b). At the national level, there is no clear and explicit policy regarding urban open spaces and parks. The existing provisions are fragmented and embedded within other policies and regulations. Decline in open spaces in Kathmandu valley and other major cities owes largely to unmonitored encroachment – reflection of poor governance. Declining level of amenities such as parks and open spaces and incompatible land uses have affected the social and cultural neighbourhood environment as a result (MoUD, 2017b).

In Kathmandu 0.48% municipal area can be categorised as open space. This is clearly insignificant and needs priority attention, but interestingly the forest areas in the valley's centre have been preserved, mostly urban parks, forest resorts, forest reserve as well as some lands on steep slopes. Bare lands are scattered scarcely, around 4%, their usage depend on their location as well as these are privately owned, some used for agriculture and most for future built up (MoUD, 2017b).

With the after-effect of 2015 earthquake, the Government of Nepal (GoN) has made several attempts for the improvement of open spaces in Kathmandu valley. In the policies and programs 2071/72 issued by GoN, it is mentioned that gardens and playgrounds will be constructed in various places in Kathmandu. The provision of one play for each election area and preservation of public land as well as purchasing necessary lands to allocate more open spaces was on high priority (Resource Centre for Primary Health Care, 2016; KVDA, 2015; Global Shelter Cluster, 2015).

3.3   Citizen Participation and Youth Involvement

Under Local Governance and Community Development Program, municipalities are supported to create Ward Citizen Forum (WCF) and integrated plan formulation committee to empower the role of citizens in formulating annual plans, programs and budget. WCF is a group with legal status, whose members are the local people residing in the particular ward. There are other organisations at community level like 'tole' lead organisation and community-based organisation who work closely with the municipality to address the issues of the community. Out of 806 wards in 58 municipalities, 403 have WCF, however these forums remain for the most part inactive (MoUD, 2017b).

As for the youth participation, efforts have been made to make cities more youth friendly. Sports infrastructures and competitions are planned and organised for all municipalities. But mobilising the communities and the youth in urban planning and development process remains a daunting task. There is a lack of youth friendly orientation in urban planning (MoUD, 2017b). The government at the policy level also feels the need to encourage participation of community in urban planning so that their needs and issues are incorporated in the process of development with their participation in the decision-making process. There is no mention of any plans or programs for participation of children in such issues.

Though restoration of historic open spaces is also taking place, these often lack proper public hearing and consultation. Examples of restoration of some historic open spaces such as *Rani Pokhari* (historic pond) reconstruction, *Kamalpokhari* (historic pond) revitalisation, even the projects reconstruction of monuments like *Dharahara* (national monument), the greater *Tudikhel* (city open space), all of these do not come to public's eye for discussion or suggestions. A latest project facing a lot of criticism over use of artificial turf grass is Lainchaur, 'chaur' simply means 'a natural ground'. The government justified the use of artificial grass as per the demand of the residents and use of other alternatives to protect the environment. 'Was the

participation of the locals real', and also 'is not it the responsibility of authorities and experts to aware the public to preserve the natural environment' - such questions have been luring around. The government plans such projects, there is a chance for bidding but after the contract is handed over and the design development takes place, the process, the designs and the outcomes are not transparent to view and give feedback for the public. All public spaces projects come to public view only when a group of activists find out about it themselves and protest if they do not like the development. After a series of protest, the government is compelled to listen to them. This also shows that the rights are not given by default (Ojha, 2020; Himalayan News Service, 2021; Shrestha, 2018; Ojha, 2022).

3.4   Map Study

As a base map for this research, a comprehensive report of Risk Sensitive Land Use Plan (RSLUP) is taken for the categorisation of the spaces (see Figure 3.6). The zoning defined in this plan is studied and modified into the required pattern in the research after analysis. RSLUP is a ten-year guide (2010-2020) for realizing Kathmandu Metropolitan City's desired spatial pattern of development, with consideration to the city's disaster risks, mainly seismic, emergency response and disaster management capabilities, through different land policies and urban renewal schemes. It has used the previous and existing land use plans, maps and land use-related programs of the government, as well as policies, initiatives and studies in disaster risk management that affect Kathmandu.

In the RSLUP, open space is recognised as a vital component of a managed urban environment (UNDP Nepal, 2011). This was taken as a guide for the development and planning of the entire Kathmandu working at the national and local level of the government.

Looking at the map in Figure 3.6, it can be seen that the areas of the city are divided into different sectors: east sector, north sector, central sector, the core city sector and the west. After these existing sectorial division is identified, the proposed land use distribution was achieved which are as follows.

My Interpretation and Modification

With reference to the map above, the city core sector is the most dense area with old settlement as well as most of the heritage and conservation area of the city. Central sector has mixed residential dense land use. Each of these sectors is taken as one category each for further study.
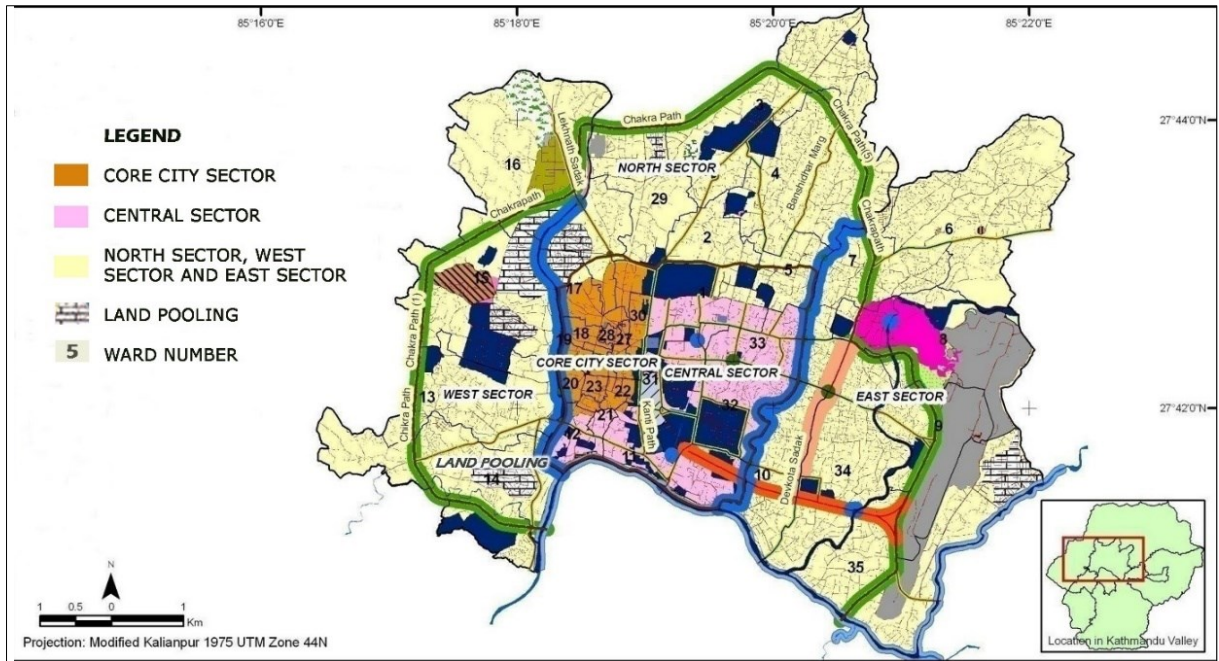
Figure 3.6. 5 Sectors of Kathmandu city with proposed land use (UNDP Nepal, 2011).

It can also be observed that north, west and east sectors have similar land use plan, as seen in the map, hence, they are considered as one category. Here, open spaces are privatised (mentioned prior in this chapter). These private open spaces create a huge inequality in urban areas especially the children as some of them get private gardens to play and most of them have streets to explore, which are unsafe nowadays with traffic movement.

In these sectors again, land pooling is done by government to provide planned settlement plots. They have open spaces, but not used to the full potential. One of these will be taken as another category. When the above trend is summarised, Open Spaces of these sectors/zones will be studied as shown in Table 3.1 below. Altogether, four neighbourhoods (one from each sector) were selected for further study. Detailed study of each will be presented in the Chapter 7 to choose the most probable site for Participatory Action Research with the children.

Table 3.1. Types of Zones to study situation of Open Spaces.

Zones/Sectors/Areas	Open Spaces
City core sector	Traditional open spaces.
Central sector	Open spaces in haphazardly growing, unplanned settlements – most prominent scenario of Kathmandu valley.
East, West & North sector	Open spaces in the outer fringes – gated communities, elite residents, with private spaces but lacking communal public spaces.
Land pooling area	Open spaces in planned settlements by the government – even though they are planned, the monopoly of government and some dominant residents have been controlling the development of open spaces.

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3.5 Existing literature on Open Spaces in Kathmandu

There are many articles, research papers, case study papers, theses etc. that highlight the importance of open spaces. They show the decline in the presence and quality of open spaces. They further show the deteriorating state of these spaces. However, all of them limit their study to the situation of open spaces, issues regarding open spaces. The researched finding for the planning, management of these spaces is lacking. In such studies, they are presented either as suggestions or concluded in a discussion. The state of art is presented but solutions to these issues are not provided in a scientific way (cf. Timalsina, 2020; Ishtiaque et al., 2017; Chitrakar et al., 2017).

3.6 Existing literature on Participatory Action Research with Children in Kathmandu

There are few countable instances of Participatory Action Research with children in Nepal. A very few pieces of literature were found, amongst them, most of them are ongoing projects from organisations such as Participatory Action Research with Disabled Adolescents in Nepal (PARDAN).

In PARDAN, the concept is to understand how children with disabilities are affected by the pandemic, and also develop peer research methods and tools with such children to increase their participation in research. Since the project started in 2021, there is no result yet to analyse its effectiveness. The major tool used was interviews to understand their experience (Morrison, et al., 2021).

Another project developed by Institute of Development Studies (IDS) together with Freedom Fund shows the Participatory Action Research approach conducted with five Non-Government Organisations (NGOs) in different districts. Collective life story analysis was conducted previously followed by an action research workshop and then field research was undertaken for about a year. Hence there was a long-term engagement with the local people. Actions were conducted in different stages, initially identifying issues and then working together with different stakeholders.

The issues initially identified changed overtime during different phases of the research and results were obtained from the continued action research process. The research showed that there needs to be a flexible Action Research Group (ARG) that facilitates the process with the consideration of changing contexts and findings. All these projects and researches were however done in rural areas, and villages with marginalised communities, hence issues such as

child marriage, illiteracy, and dowry were discussed, and solutions were proposed. By signing petitions for the issues like no electricity and together with the ARG, many households were able to get electricity. Hence, Participatory Action Research with such communities helped to bring out the issues as well as solve them (Sharma, Oosterhoff, & Burns, 2019).

IDS has a running program - Child labour: Action Research Innovation in South and South-eastern Asia. It aims to generate a strong evidence based and inventive solutions to the worst form of child labour in Nepal, which includes surfacing key drivers and developing interventions accordingly. This project is based on urban areas and is reaching out to the children with Participatory Action Research approach (ChildHope, 2022).

In 1992 ActionAid Nepal initiated a research project with children with a vision of listening to them and respecting them (cf. Johnson, 1995). Tools such as drawing, activity profiles, mobility maps and interviews were used for action research with children. In the concluding remarks, the importance of context, implementation and team build-up is highlighted for successful research with children.

The flexibility of methods with triangulation of data is also considered an important aspect. This was also done in one of the less developed districts of Nepal, representing the rural population. It took the approach of involvement of children in development planning, education sector, raising awareness as well as advocating at different levels and thus influencing the policy frameworks (Johnson, 1995).

All these practices suggest that there have been efforts to include children, mostly vulnerable groups to bring about a change in the social issues. Nepal has been trying to reach to the most vulnerable communities to include them in decision making and participation with the help of different agencies and foreign aids. The results of these approaches show that successful stories have been created thus giving scope for further research with a similar approach.

3.7   Key Points from Policy Review and Contextual Secondary Data Study

Government is:

- Making policies and not implementing them.
- Not regulating and controlling the use and management of open spaces.
- Providing ambiguous plans which the local level cannot comprehend so they remain just in the papers and community development, or changes are taking at their own pace.

Many research papers too:

- Show and highlight the issues of open spaces but lag in giving solutions at the practical level. They are more as case studies, historical studies, they identify the issues and conclude with some suggestions and discussions.

Map study showed:

- Zoning plan has been prepared with thorough study and land use types.
- It helped in identifying different sites for further study.
- Grassroot study and action is still missing.

Participatory approaches are:

- Limited to institutions and are not inclusive.
- Mostly concentrated in rural areas, not considering vulnerability of urban poor.

Innovative and inclusive approach needs to be taken when it comes to taking action at community level. An approach at the grassroot must be initiated which acts as a framework for such process. The decision making does not come at once just by welcoming it. It comes from prolonged practices and methods. Hence, the aim becomes to engage children in such process so that in future, there will be active and responsible citizens who can actually contribute to the process (Hart, 1997). While the Convention on the Rights of the Children rights is accepted in Nepal too, the practice of it at the local level is seen to be missing. From the data from 2017 survey, in Kathmandu city, the total number of schools are 773 with 638 private schools, that comprises 82% of the school scenario (Statistics, Policy and Research Section, 2017).

"The children of middle-income families going to private schools are considered to be the privileged ones. But have we ever asked them, what they really feel? Have we considered their basic need of play and exploration is fulfilled? I start my research with these questions to build up the research design. We have talked about haphazardly growing city, we have talked about loss of open spaces and social life, have we asked how the children living in such situations are really coping with it? What are their ideas to make the situation better?"[9]

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[9] Researcher's self-expression

4   Reviewing Concepts and Concise

This literature review highlights the importance of open spaces in the cities and communities especially for the vulnerable group (in this research – children). Then the study looks in more closely into child friendly spaces – not just providing them a holistic environment but to make them involved. Whilst addressing these, it studied the contemporary practices of the planning especially at community level – which involved engaging the community, listening to them and considering them as experts in their own world. The study further discusses the literatures that encourage children's participation to create their own environment, while making them responsible and capable citizens and addressing the community issues to bring about a social change. Experts' roles in the process as well as specific approaches are discussed. Open Space Strategies OSS and United Nations Convention on Child Rights (UNCRC) are looked upon together to bring a combined understanding of *Planning open spaces with and for the children*.

"Walking barefoot in the wilderness, listening to the birds chirping, hearing the laughter and cry of others, developing love for nature and empathy for other beings, life is how you treat it. Treat it well and see how you will be loved by all the lives. Hang in there because there are many, those blossoms will grow again and heal your innocent heart. The compassion you have for others is developed through these intense observations. Step out and live in the community. Make yourself believe that you are they and they are you. You are part of the whole and alone you do not exist. Develop this supporting spirit because this is the only reality. Run around wildly without destination and bless the encounters."[10]

Let's start with a story – How man and his environment is important and how the product of this is directly related to the child and her environment.

4.1   Man and his Environment

United Nations Educational, Scientific and Cultural Organisation (UNESCO) (1968) established a 10-year program on 'Man and His Environment' to increase understanding of potential people-centred solutions to environmental problems. Here, man does not denote a gender but represents Human beings. In order to create policies that could promote it, the program plan recommended new forms of environmental assessment that would include human perceptions, values and behaviours. This gave platform for interdisciplinary exploration of social researchers with natural scientist, architects, planners and other environmental

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[10] Researcher's self-expression

practitioners. Lynch was invited as an expert for the same (cf. Chawla, 2002). His research on man and the environment had given him a different perspective on how to see a city and its transformation. His book 'Image of a City' focussed on adults' perception of different types of cities and movement through them (cf. Lynch, 1960). Later, he himself criticised this as "there was no sense of development in it, of how that pattern came to be, nor of how it might change in the future, as the person matured, her or his functions changed, her or his experience enlarged, or the city itself was modified" (Lynch, 1984, p. 154).

Hence, a new approach was underway, he wanted to see how city images develop through the eyes of children. The motivation for this literature review is also in line with my growth as a researcher and planner. My master's thesis was on categorisation and management of open spaces in Kathmandu (Dhungel, 2016) which meant this should go into policy making with the adults and authorities. As I finished my studies and tried various ways to reach out to the concerned authorities, I failed drastically as a planner. After a series of struggle, I started thinking of alternatives for my approach. So, looking at the bigger goal but setting up small steps to reach there was my approach. Therefore, I considered working in small neighbourhoods. But there too, the adults were not so interested and curious for the projects and then I decided to work with the children and like Lynch, I found it meaningful to ask people how they are shaped by their interactions with the places they live, from childhood on (cf. Chawla, 2002).

4.2   Children and their Environment

"It is not alone the desire to try and use (their) power that prompts (children) at this age to seek adventure high and low, far and wide; it is particularly the peculiarity and need of (their) innermost lives, the desire to control the diversity of things, to see individual things in their connection with a whole, especially to bring near that which is remote, to comprehend (the outer world) in its extent, its diversity, its integrity; it is the desire to extend his scope step by step" (Froebel, 1826, pp. 102-103). Froebel developed the concept of kindergarten and defines it as both a garden for children and garden of children. A place where they can observe and interact with nature and also a place where they themselves can grow and develop in freedom from established norms. In these instances, play is considered to be the highest expression of human development in childhood with abundant of creativity to support adult life (Froebel Web, 2008). Recent research papers on children and outdoor environment highlight the importance of play for their healthy development (Bento & Dias, 2017). A culturally rich neighbourhood supports healthy development and helps children gain positive identification and higher self-

esteem. Conversely, creative play and free individual expression enriches the culture (Chawla, 2002).

The work of Horelli (2007) for evaluating Environmental Child Friendliness, where she aims for a holistic understanding of the term environment informs the basis of this research. The environment means the living environment in its complexity. It is not just the natural environment or the built structure but the whole physical, psychological, economic, political and cultural environment, also supported by the concept of desired environment education model for the children taking a holistic approach (Hart, 1997). The ten dimensions of urban environment are housing and dwelling; basic services – health, education, transport; participation; safety and security; family, kin, peers and community; urban and environmental qualities; resource provision and distribution, poverty reduction; ecology; sense of belonging and continuity; good governance (Krishnamurthy, Steenhuis, Reijnders, & Stav, 2018).

4.3   Open Spaces

Looking at the urban history with broad perspective shows that open spaces has assumed a tremendous range of forms and functions, with a variety of benefits for all urban populations (Stanley et al., 2012). "Public Space is the stage upon which the drama of communal life unfolds" (Carr, 1992, p. 3).

Carr et al. (1992) define public spaces as open, publicly accessible places that facilitate the main activities which are essential for community building. Carmona et al. (2008, p. 5) find that "public space relates to all those parts of the built and natural environment where the public has free access. All the streets, squares and other right of way, the open spaces and parks, the public/private spaces where public access is unrestricted." This includes all outdoor spaces including streets and squares, woodlands and agricultural land, the traditional parks and gardens (REC Slovakia, 2011).

Public spaces can provide spaces for people to meet and socialise and engage with the world through observation. With the basic provision of safety and amenities, the open spaces can provide spaces of freedom, where older people can be sociable, spontaneous and creative and enjoy, hence improving their overall wellbeing (Coles & Millman, 2013). They are considered to be the lungs of an urban area allowing people to breathe, relax and feel comfortable (CABE Space, 2009).

Open space in cities can be seen as places to celebrate cultural diversity, to engage with natural processes and to conserve memories. Urban open spaces should not only provide a place for meeting with strangers and to socialise, but it should also be a refuge to someone wanting to spend some time alone (CABE Space, 2009).

Rogers and Force (1999, p. 57) states "to achieve urban integration means thinking of urban open spaces not as an isolated unit- be it a street, park or square- but as a vital part of urban landscape with its own specific set of functions. Public space should be conceived of as an outdoor room within a neighbourhood, somewhere to relax, and enjoy the urban experience, a venue for a range of different activities, from outdoor eating to street entertainment; from sport and play areas to a venue for civic or political functions; and most importantly of all a place for walking or sitting-out. Public spaces work best when they establish a direct relationship between the space and the people who live and work around it."

Public space is considered as a dynamic space which balances the otherwise stagnant daily routine like work or household, they provide movement, communication and common places for recreation and relaxation (Carr, 1992). The dimensions of child-friendly environments drawn from Francis and Lorenzo (2002) and that for successful public spaces according to Carmona (2018) delineates the characters of public and child friendly spaces as shows in Table 4.1.

Table 4.1. Comparative table - public spaces vs child friendly space (cf. Francis & Lorenzo, 2002; Carmona, 2018). The bold lettered words represent similar characters between two columns one of public space and another of child friendly environment.

Successful Public Spaces	Child-friendly Environment
Evolving (whether formal on informal in nature)	Accessible
Diverse (avoiding one size fits all)	**Diverse**
Free (with secure rights and responsibilities)	**Controlled**
Delineated (clearly public in their use)	**Mixed use**
Engaging (designing in active uses)	**Adventurous**
Meaningful (incorporating notable amenities and features)	**Safe but not without risk**
	Meaningful
Social (encouraging social engagements)	Autonomous
Balanced (between traffic and pedestrians)	**Social**
Robust (adaptable and distinct in the face of change)	Convivial/welcoming
	Serene
	Participatory/Inclusive

When looking at both of these carefully, they are quite similar and not something new that has not been addressed throughout a long term of research carried out in and around public open spaces. The **bold fonts** show that the purpose of public spaces and child friendly environment have a lot of similarities in terms of their functions. It should be noted that, even in 2018, the basic characteristics that an open space should possess is in line with the old studies. This further highlights that physical component and theoritical understanding should be taken into action to find out the recent need of open spaces as they are dynamic and always inclined to change and adaptation (Carmona, 2018).

Though the activities may have changed in a public space, the functional gist of it still remains the same from the nineteenth century to the recent times. A park for example is considered successful if it meets the expectation of its varied users. As observed above for the child friendly spaces – accessible, self-directed, welcoming and participatory seem like some new additions. Hence, instead of a perfect design, the planning should be done to fulfil the requirement of the users and this could only be achieved if a participatory approach is considered (Thompson, 2002).

Social theorists and political theorists alike have views towards open spaces. High quality, pedestrian-friendly neighbourhood spaces are argued to make beneficial interpersonal connections (Jacobs, 1961; Whyte, 1980; Tibbalds, 1992). It is also argued that Urban spaces encourage exchange and understanding among diverse subcultural groups as a public sphere where the functioning of democracy is strengthened (Carr et al., 1992; Sandercock, 1998; Madanipour, 2003). The accessibility of green open spaces has been ideologically linked with positive human health outcomes in the past (Howard, 1898); to more complex issues concerning urban sustainability (Sanders, 2012); and medical health (Vries, Verheij, Groenewegen, & Spreeuwenberg, 2003; Bedimo-rung, Mowen, & Cohen, 2005) in the most recent times. Even more, equitable access to public space, especially proximity to parks, is nowadays addressed as an environmental justice concern as well (Talen & Anselin, 1998; Wolch, Wilson, & Fehrenbach, 2005).

4.3.1   Open spaces for Health, Environment and Aesthetics

According to the hypothesis on biophilia by Wilson (1984, p. 1), humans harbour an "…innate tendency to focus on life and lifelike process." In urban areas, urban open spaces play the role of substituting the natural environments to provide opportunity to urban dwellers to get exposed

to forms of nature and natural process, which they by instinct crave for (Brookfield, 2007). Living, in a non-natural environment, stresses yet vital importance of these open spaces.

A network of well-designed and cared for open spaces add to the character of places where people would want to work, live and visit. It also provides the vital green infrastructure that helps to deal with natural disasters like floods or even mitigate and adapt to climate change while providing wildlife habitats, sporting facilities or simply beautiful parks (Brookfield, 2007).

Wetlands and forests may be considered to be more of a natural habitat preserve but nicely tamed grass lawns may be preferred for its attractiveness. Hence land use planning and management must balance the natural and cultural ecosystem services offered by these different types of open spaces. It is very important to understand that cultural acceptance is essential for maintaining ecosystems services (Wang, Nassauer, Marans, & Brown, 2012).

4.3.2   Open space as Social and Cultural Space

Cities are active social spaces which are always changing on the ground and are shaped by the communities living in them (Gleeson & Sipe, 2006). The interaction among the individuals especially that of a heterogeneous society is possible in public spaces, thus an integral part of our lives. This provides a platform for communication, negotiation or simply a chance to intermingle. The character of the city is shown as well as an identity of the community is represented (Holub, 2011).

The tangible aspects may be possible to be built by an outsider but the intangible aspects of a neighbourhood that grows among its inhabitants over a period of time (Nasar & Julian, 1995), with the neighbourhood association and mutual cooperation depends also on individual factor (Francis, Giles-Corti, Wood, & Knuiman, 2012). McMillan and Chavis (1986) propose four key elements for the sense of community: membership, influence, reinforcement and need fulfilment, and shared emotional connection.

The mobility of an individual depends highly on number of factors such as age, economic status, lack of private transport etc. and conceivably the ones who are least freely mobile (children, older people, disable people and unemployed) are in the most need of parks and safe outdoor setting. In such scenario, accessibility to appropriate local open spaces is highly desirable. The majority of the users of an urban park want to come by foot and they would do so regularly if

it is at a walking distance (3-5 minutes) from their home or work (Kaplan & Kaplan, 1989; Greenhalgh & Worpole, 1995; Godbey, 1992).

Corraliza (2000) on people's preference for pathways and stay places, revealed that non spatial qualities of landscape are just as important as any spatial qualities, but it also revealed that people preferred pathways to stay places. Corraliza suggests that streets provide more opportunities to engage with other people and it is truly representative public open space for all the users.

4.3.3   Open Spaces as Political and Economic Spaces

Urban parks in particular are places where democracy is worked out, literally on the ground. Hence, the way such spaces are designed, managed and used demonstrates the realities of political influence (Thompson, 2002). Many theories on public space are seen to be a sign of democracy. The very opportunity to express their voices in public, whether it is done individually or collectively, indicates that the space is democratic. Participation is at core of democratic process. The famous philosopher Henri Lefebvre argued that when people's open participation can be seen in their public spaces, the space can be seen as being democratic (cf. Jagannath, 2016). Once we talk about the democratic provision of open spaces, the consideration must be highlighted after the design and construction phase, the management of these spaces is equally important and it is hard to decide who pays or helps to maintain and manage (Thompson, 2002). Open spaces have also been linked to increase property value with the boost of different activities engaging the community such as cultural display and tourism (CABE Space, 2009).

4.3.4   Open Space as Something More

"We need precise plans to define artistic visions, function-specific space, and the neat, safe and decorative parks which offer equity of access for all. But these plans will be within the fuzzy framework of an open space network which is dynamic in aesthetics, ecological status, allowing for a larger mosaic, patchwork of chaining, loose-fit landscapes" (Thompson, 2002, p. 70).

The telecommunications and information technologies has made our society virtual where our friendships and relations extends beyond the geographical locations of the individuals. But this also helps us to connect with the local people more easily giving an opportunity to engage in social events in short notice or to call someone to meet at a public place from a mobile phone. This could be one tool to include people in the open space management (Thompson, 2002).

The argument that the 21st century is in dire need of open spaces more than ever has been the common ground for many researchers. Rogers and Force (1999) interprets the urban landscape network with three main factors as central drivers of change.

- The technical revolution centred on information technology and global to local networks connecting people.
- The ecological threat, with its implications for the importance of sustainable development.
- The social transformation, with life patterns reflecting increasing life expectancy and new lifestyle choices.

4.4   Children and Open Spaces

Children spaces were typically natural environments, undeveloped waste spaces, or small leftover spaces in the home or outdoors. Such spaces gave children the opportunity to create their own worlds and find themselves in them (Green & Turner, 2017). In the neighbourhood place, there were real dangers and consequences. Through the routine activities of their everyday lives, the children established roles, motivations, and values related to being friends, siblings, and welcoming neighbours.

Tim Gill has been a longstanding advocate for child-friendly urban design (cf. Rethinking Childhood, 2010). He advocates for changing the perspective of childhood. He says that the children must be reconnected with the people and places around them, and with the natural world. The neighbourhoods design must support children to walk, cycle and get closer to nature and play near their homes. There should be chances for children to take risks, make mistakes and have everyday adventures to test themselves and their boundaries (Rethinking Childhood, 2010).

"This is a crucial and much-neglected topic. If children are not designed into our cities, they are designed out. This means that they are deprived of contact with the material world, with nature, with civic life and with their own capacities" (cf. ARUP, 2017, p. 15).

Spaces away from their homes, for socialising and spending time with their peers, providing opportunities for interactions, provides a rich education for children about the world around them and the people who live in it (Chawla, et al., 2012). It is not only parks and playgrounds that are spaces for children, they need to be able to use the whole public realm safely and without fear. For this kind of experience in their neighbourhood they do not just need parks, but they need spaces which leads them to parks and playgrounds to be safe and accessible. At every

age, children like to explore undefined spaces which is flexible both physically and imaginatively. These spaces ought to be free from adult authority and even not planned for children (Chawla, 1992).

4.4.1 Children and Play

Article 31 of the UN Convention on the rights of the child recognises 'the right of the child to rest and leisure, and to engage in play and recreational activities appropriate to the age of the child and to participate freely in cultural life and the arts' (UNICEF, 1989).

"Play is defined as any activity freely chosen, intrinsically motivated, and personally directed. It stands outside 'ordinary' life and is non-serious but at the same time absorbing the player intensely" (Goldstein, 2012, p. 5). Psychiatrist Stuart Brown writes that play is "the basis of all art, games, books, sports, movies, fashion, fun, and wonder – in short, the basis of what we think of as civilisation" (cf. Goldstein, 2012, p. 5). As been remarked by play theorist Brian Sutton-Smith, "the opposite of play is not work, but depression" (cf. Goldstein, 2012, p. 5).

The basic need of children from the open spaces is opportunity to play. Play has a crucial role in children's development, if children are deprived of play, they not only suffer presently but also in the long term. Exposure to sunlight, natural elements, and open air is available in the outdoors which aids in a child's bones development, stronger immune system and physical activity (Bento & Dias, 2017). Along with these benefits of outdoor play, children also develop social skills, emotional responses, creativity and many other skills as well as cognitive development (Shackell, Butler, Doyle, & Ball, 2008; Bento & Dias, 2017). Hence in order to succeed later in life, play is crucial. Specifically, from self-directed play with no adult interference, children can learn skills, values and become educated in real sense (Gray, 2020).

The exploration of the environment also occurs during such plays where not only certain designated spaces are child friendly but the whole neighbourhood supports children's exploration and freedom. As Play England Charter for Play states, "Children should be able to play freely in their local areas. Children have the same right to use and enjoy public space as others. Local streets, estates, green spaces, parks and town centres should be accessible for children and young people to move around in safety and offer places where they can play freely, experience nature, explore their environment and be with their friends" (cf. Shackell et. al., 2017, p. 10).

4.4.2 Children and Place Attachment

"A place is never simply location, nor is it static, it is a cultural memory which colonization buries. Like culture itself, place is in a continual and dynamic state of formation, a process intimately bound up with the culture and identity of its inhabitants. Above all, place is a result of habitation, a consequence of the ways in which people inhabit space" (Ashcroft, 2001, p. 156).

Having or making special places by children themselves give them a sense of self and belief that they have control over their thoughts and behaviour. Langhout (2003) suggests there are many research on children and space which shows children's place attachment, and sense of place can bring about autonomy, social support and positive feelings (cf. Green & Turner, 2017). Sense of community is a major psychological construct of the residents of urban neighbourhoods built over a period of time (Nasar & Julian, 1995). Rogers and Sukolratanametee (2009, p. 326) define sense of community as "the extent to which any member of a neighbourhood feels connected to and committed to others in the community, which bears on a sense of security and belonging". This reinforces the understanding that the physical design of neighbourhood cannot alone develop sense of community (Garde, 2011).

Hart's (1979) pioneer work on children's environment investigated four areas of interaction with the environment – spatial activity, place knowledge, place values and feelings and place use. Hence, instating that, children use their environment in a very personal way, thus building an attachment.

Chawla (1992, p. 64) mentions that "children are attached to a place when they show happiness at being in it and regret or distress at leaving it, and when they value it not only for the satisfaction of physical needs but for its own intrinsic qualities."

Winnicott (1971, 1975) defined a holding environment as a necessary condition for healthy psychological development and offered what can be called an ecological conception extending from mothers' arms to locality and beyond. One can distinguish a series – the mother's body, the mother's arms, the parental relationship, the home, the family including cousins and near relations, the school, the locality with its police stations, the country with its laws (Driskell, 2002).

For a successful 'holding environment', children simply enjoy living there with both its good and bad sides. A sense of belonging and self-identity can be achieved through constant exposure,

stable cultural expression. Culture gives form to children's identities that are reflected in their relationship with their surroundings. Familiar surroundings make you feel you are in your place, the place that others share with you in a collective culture. You belong to this place and the place belongs to you – socially fluid. Winnicott questioning the conventional belief of putting a negative mark on 'poverty' and 'slum' halts stereotyping its residents negatively (cf. Chawla, 2002). Research conducted by Chawla and Driskell in 2006 in Bangalore, India showed a quite surprising result. Children living in a high-rise apartment with all the facilities had no affinity with their environment (Chawla & Driskell, 2006). They wanted to move out of it. The children who were living in the slum in the same neighbourhood, who were actively helping their parents with their daily chores enjoyed their environment and also had a gist to make it better as part of their social responsibility (Driskell, 2002). This place attachment plays a huge role in developing responsibility in taking care of the environment.

4.4.3 Children as Marginalised Population

"We have further removed children from the day-to-day world and placed them in an artificial world – one geared to their needs, where they are central, but separated from the real world. We have created an artificial world – with child-sized furniture and home equipment, materials such as thick paint brushes, blocks and puzzles, and an outdoor area with carefully designed climbing equipment for safety" (Fleer, 2003, p. 66).

Urban growth, technological advancement and globalisation is having a major impact on children's free play. Fear of accidents, interactions with strangers and abduction, car traffic etc. are the most frequent factors comprising to the diminishing outdoor play activities (Bento & Dias, 2017). This takes away children's opportunities to explore and understand their local environment thus removing them further away from the community. The most common public debate is about what the children need rather than what the children wish for (cf. Thomas, 2007). To reintegrate children into the society, we have to consider them as equal in all rights. While researching with them, there appear challenges as adults in all societies have more power over children making them vulnerable to exploitation (Hart, 1997). And most of all, if any organisation or experts or policy makers genuinely want to work with the children, it is important to investigate about the realities of their lives which is only possible through direct interaction (Boyden & Ennew, 1997). Special attention needs to be taken for this process to be voluntary (Hart, 1997).

4.4.4 Children as Experts

Children are now taken as social actors who are 'experts' on their own lives (Mauthner, 1997; Kellett & Ding, 2004). Likewise, Punch (2002) identified three different approaches to research with children as have been listed in (cf. Fargas-Malet, McSherry, Larkin, & Robinson, 2010).

- One which considers children as practically the same as adults and employs the same methods as those used with them;
- One which perceives children as completely different from adults and uses ethnography (participant observation) to examine the child's world; and
- One which understands children as similar to adults but with different competencies, and which has developed a plethora of innovative and adapted techniques.

Krishnamurthy et al. (2018) suggest creating instrument for children's participation in decision making, equal opportunities, quality of public spaces and safety, child friendly strategies, which can be incorporated into planning and design. Advocating child friendly practices could add to the role of urban design and planning which is essential for creating built environments. Urban design and planning with the focus on public spaces and child friendly environments are central to building strong and vital neighbourhoods, cities and regions (Krishnamurthy et al., 2018).

Children's involvement in solutions to community problems and their participation in the formulation of projects is important as they provide valuable insight in analysing the problems and in recommending interventions in the forms of policies and design. Hence, the approach should be promoted (cf. Krishnamurthy et al., 2018).

Planning with young people is not just about challenging or designing physical forms or structures for them. It is about understanding the culture of a community and young's people's role with it (Malone & Hasluck, 1998). Children need to be highly reflective, even critical, participants in the environmental issues in their own communities. They must think as well as act locally while also being aware of global issues. For this to foster, the educational model should also be holistic. Environment education should not only include the natural science models but must be inclusive with respect to the culture, history and social science (Hart, 1997).

4.4.5 Working with Children – Participatory Approach

The participatory approach with children was started as an advocacy process by the adults to show the needs and defend the rights of children in design and planning. This has now been widely accepted and taken as a mainstream approach to planning. More and more communities

are attempting to include children in design and planning of their environment (Francis & Lorenzo, 2002). Planning and design processes has helped to improve children's participation in the development of the local environment or community (Chawla, 2002; Freeman & Aitken-Rose, 2005; Horelli, 1997). Nonetheless, a genuine participation is still not accomplished (Hart, 1992; Jansson, 2015) as participation by children is not only for achieving a better finished product but it is a process to make the children responsible to their locality for overseeing and maintaining the site (Iltus & Hart, 2016).

Hart (1992)'s ladder of participation (detail in Chapter 6.3, p.93) gave the energy to start participatory work with children. Since 2000s, children and young people's participation is recognised important. Involving young people in making improvements to the places where they live is the actual process of participation. Driskell (2002) uses a variety of participation methods that were used in various places globally, for example, observations, drawings and dramatizing. Platforms for listening to them and considering their ideas valuable is the approach (Driskell, 2002). Young people should be involved in public decision making through different practical experiences so as to sustain participation on a long term (Kirby, Lanyon, Cronin, & Sinclair, 2003). Simple approach such as flexibility of time and a feeling of ownership is considered vital for the success of any participatory process with youth (Bell, Vromen, & Collin, 2008). More so, children and young people experience their surrounding closely tied to their site-specific experience of place, with the richness of information obtained through child led walks (Cele, 2006). Although growing bodies of research show how and why children should participate in city planning practices, they are mostly still excluded from the process. Hence, this initiation must be taken at local level and with simplicity of approach (Chawla, 2002; Karsten & Vliet, 2006).

Participatory approach specifically, Participatory Action Research involves self-reflection and critical awareness so that a systematic re-examination is possible. This re-examination helps in improvising the process as well as redefining the roles of different stakeholders (Francis, 2005). Details regarding methods of working with children and methodology for the same will be discussed in Chapter 5 and 6 (Case Study and Developing a Methodology, respectively).

4.5   Experts in the Process

Public space intervention approach to developing, enhancing and managing public space requires both "top down" and "bottom up" strategies. The suggestion from Project for Public Spaces (PPS) is that, for the bottom-up approach, there should be an honest assessment of how

existing public spaces are performing or not used. This inventory is a vital part of developing open spaces at the community level (Project for Public Spaces, 2014). With the approach of child inclusive urban design where initiatives such as co-creating design of public space with children and parents, bottom-up neighbourhood design should be considered (Krishnamurthy, 2019).

Carmona (2018) talks about how planner is essential part of public space design and management. It is important to achieve a proposed set of rules relating to critical planning considerations for the development and regeneration of public spaces and then more detailed considerations for evaluating the quality of the design of public spaces. Though normative principles are criticised to be narrow in their approach, evidence-based research which articulates the need of such studies should be supported. Cautionary measures shall be taken on how to benefit from this framework for a wide range of apparitions (Carmona, 2018).

Enabling children to participate in society has been an important consideration for those who research, plan and design environment for children. When undertaking research with children, researchers must gain the cooperation of a range of different 'gatekeepers', such as school staff and parents (Cree, Kay, & Tisdall, 2002). The Children's Environment Research Group (CERG) took the approach of involving children as adults in design of outdoor play spaces. The idea was to work with the children, who could not go to paid parks like their middleclass counterparts, in the low-income neighbourhoods that are tagged as being unsafe for children. The participation of children was so that their competence would be developed (CERG, 2012). Giving them chance to express themselves may not be sufficient, to make them capable of raising their voices is important. Reaching out to young people, nurturing their ideas, building support for their work and bridging the generational gaps should be in priority of adult allies such as parents, teachers and youth workers (cf. Carmona, 2018). One more key factor is the freedom to participate or not. If some children do not wish to participate at all, it should be made sure they got the equal opportunity to have a say on the process and simply leave (Iltus & Hart, 2016).

Urban planners, designers and other urbanists wanting to build better cities, working with children have the advantage of providing them with a moral high ground in negotiation with city governments, as few mayors or other officials will overtly oppose the reasonable requests of a group of children who want to cooperate to improve their environment (Lynch, 1977). Though governance is the function of local government, to effectively implement child rights,

urban planners, municipal officials, community development staff, non-government organisations, educators, youth serving agencies, youth advocates and others- involved in community development process must all work together and support this process (Bento & Dias, 2017). The challenge is how they can become active agents to promote this kind of creative process, and therefore create the basis of culture (Lynch, 1977).

4.6 Open Space Strategies

By preparing a strategy, it is ensured that the open spaces are protected, and a network of high-quality open spaces are created which can (CABE Space, 2009):

- Reinforce **local identity** and **civic pride**
- Enhance the **physical character of an area**, shaping existing and future development
- Improve **physical and social inclusion, including accessibility**
- Provide connected routes between places for wildlife, recreation, walking and cycling, and **safer routes to schools**
- Protect and enhance biodiversity and ecological habitats
- Provide green infrastructure and ecosystem services
- Provide for **children and young people's play and recreation**
- Raise property values and aid urban regeneration
- Boost the economic potential of tourism, leisure and **cultural activities**
- Provide **cultural, social, recreational, sporting and community facilities**
- Protect and promote understanding of the **historical, cultural and archaeological value of places**
- Contribute to the creation of **healthy places,** including **quiet areas**
- Provide popular **outdoor educational facilities**
- Promote the opportunities for **local food production**
- Help mitigate and adapt to climate change
- Improve opportunities to enjoy **contact with the natural world**.

The strategy is best when it is backed by elected members. This helps secure resources, maintain momentum and ensure adoption. When planned properly, high-quality public spaces offer huge economic, social and environmental benefits to their localities and communities (CABE Space, 2004). Based upon this, the functionalism of Open Spaces is categorised as follows: Environment and Ecology; Social; Structure and Aesthetics; and Economic (CABE Space, 2009).

The above-mentioned points about strategy are from London prepared by Commission for Architecture and the Built Environment (CABE) space for the Mayor of London. Likewise, many other cities have adopted open space strategies in the recent years, for example, Haringey in UK, Victoria and Melbourne in Australia, New Zealand and so on, for the proper design, management and maintenance of open spaces (Victoria State Government, 2019; Haringey London, 2022; Upper Hutt City Council, 2022).

These open space strategies are proper guidelines for the government, councils to plan the current and future uses of open space within a municipality. All these strategies highlight the importance of sub strategies at the local level which includes play, education, therefore being an important influence for children. Those directly linked with the children and their environment (**bold words above**) are safer route to schools, children and young people's play and recreation, healthy places, outdoor educational facilities, local food production, contact with the natural world, physical and social inclusion and accessibility, promote historical and cultural value of places and reinforce local identity and civic pride. Hence planning open spaces with children and for the children seems to be in line with the approach of the latest strategies of open space planning.

4.7   United Nations Convention on the Rights of the Child (UNCRC)

According to the UN Convention on the Rights of the Child (UNCRC), there are 54 articles that require governments to provide for children's needs, protect them from abuse and exploitation, and guarantee their participation in civil society. They have the rights to express their views in all matters affecting them, freedom of association and peaceful assembly, freedom of thought and expression, access to information, and participation in the cultural life of their communities (UNICEF, 1989). The surrounding of the child related to identities and culture in the creative process is influential (Birch et al., 2016). Article 12 and Article 13 to 17 introduces a viewpoint of respect for children as active participants in their own lives. In most regions of the world, where children have not traditionally been considered to have the experience, knowledge or understanding to be able to contribute or take responsibility for decisions affecting their lives, it is a challenging encounter (UNICEF, 1989). But the convention has been a turning point for this belief as children have shown to have unique perspectives and expertise to bring forth the challenges they face as well as provide strategies to resolve them (Lansdown, 2011). Hence children and youth were not only considered as a

population with special needs but also one with special energies and insights that could make an impact in the process of human settlement development (Chawla, 2002a).

How a child learns during his/her childhood has a major impact on how responsible he/she becomes as a citizen. Dewey claims that education and life are one and the same thing (Sikandar, 2015). This approach has also been recognised by UNESCO's Education for Sustainable Development (ESD) initiation. It revolves around the same philosophy that a society can be transformed through education. While it addresses issues such as climate change and biodiversity, it also encourages individuals to be responsible actors and resolve challenges, respect cultural diversity and contribute to creating a more sustainable world (UNESCO, 2019).

In 1992, United Nations Conference on Environment and Development (UNCED), nations of the world adapted a new definition of development – sustainable development – that balances development with the protection of the environment, so as to equitably meet the developmental and environmental needs of present and future generations. Agenda 21, the plan of action that the assembled governments endorsed, identified children and youth as a major group who must help make this vision a reality. Their participation in long-term programs is vital. Realising this vision will be the great necessity of the 21ˢᵗ century (United Nations Sustainable Development, 1992).

Hence integrating the Open Space Strategies with the concept of UN's Convention on the Rights of the Children could be a new model in urban planning where the children are included to the contemporary issues of the community. As a wider scope, with participation and awareness, children in turn can contribute towards a sustainable society where they realise their responsibility from early age and work towards achieving it.

"I used to think the top environmental problems were biodiversity loss, ecosystem collapse and climate change. I thought that with 30 years of good science we could address those problems. But I was wrong. The top environmental problems are selfishness, greed and apathy…and to deal with those we need a spiritual and cultural transformation – and we scientists don't know how to do that." – Gus Speth, Environmental lawyer (Sterling, 2019).

5   Case Study

This chapter shows the methods and processes that has been used while working with children in different parts of the world, especially related to their environment.

The case studies will be done of the following main projects.

- Case Study 1 – Growing up in cities
- Case Study 2 – Cities Alive: Designing for urban childhoods
- Case Study 3 – Child friendly urban design
- More Case Studies – Boechstrasse and Antwerp

5.1   Case Study 1 - Growing up in Cities

Below is given a general overview of the books, projects etc. in chronological order which shows the progress made with respect to considering children's perception of their environment. Interestingly, the list below is procession of the one before. Hence, demonstrating a need for continuous process, action and reflection.

Though changes were taking place at different timeline due to the change in urban form, function, occupation, political scenario etc., this shows a need for a comprehensive methodological approach to understanding children's world.

Table 5.1. Growing Up in the cities Project Chronology.

Year	Book/Project	Authors/Project Lead
1970s	Growing up in cities - Project	Kevin Lynch with UNESCO
1977-79	Growing up in cities - book	Kevin Lynch
1994	Growing up in cities - Project	Louise Chawla with UNESCO
2001	Growing up in an urbanising world - book	Louise Chawla
2002	Creating better cities with children and youth - book	David Driskell
2018	Placemaking with Children and Youth: Participatory Practices for Planning Sustainable Communities	Victoria Derr, Louise Chawla, Mara Mintzer

In 1970s, Lynch envisioned a project with United Nations Educational, Scientific and Cultural Organisation (UNESCO), to understand low-income adolescents' use and perception of their urban environments as a start for identifying their ideas and energies in creating more liveable

cities. It would extend participatory processes to the young, with a focus on urban communities (cf. Chawla, 2002). Young people's perspective of their local environment and their recommendation for improvement was the main theme of the project which would aid in addressing the global crisis of the environment.

Children were asked directly through conversations, and they would show how they sense and feel about the various components of their environment, from their rooms, homes, streets, parks, playing fields, schools, to wastelands and city centres. Also, they shared about the activities they were engaged in these various places. Lynch through his years of active publications, emerged as an explorer who learns through asking people about how they feel about their environment. These guidelines opened up paths for researchers to practice it in other parts of the world. Though the cities where the studies were done had strong cultural, social and economic differences, the book shows some prominent universals of growing up and this makes it more interesting and useful. This was summarised in the book 'Growing Up in the Cities' (Lynch, 1977).

As have been mentioned earlier in the previous chapters, after United Nations' Convention on Rights of the Children (UNCRC) was adopted, it created platform for young people's participation with broadened visions, ratified by all the UN member nations.

In response to this, in 1995, Chawla initiated a carry on of the work done by Lynch in 1970 as 'Growing Up in the Cities' (GUIC) project, again with the support of UNESCO. At this time, Chawla conducted the research in many cities including the two previous cities where Lynch had worked. The book Growing Up in an Urbanising World (GUIUW) is the document of the new 'Growing Up in the Cities' (GUIC) project (Chawla, 2002). It takes it a step further by not only questioning children's perception but exploring methodological approaches on how young people evaluate the place where they live and their ideas for improvements. It discusses about the processes for bringing together different disciplines to work with children to improve urban conditions and in the process, improve their capabilities for a progressive positive change. Considering an action research approach the project becomes an ongoing opportunity for realising changes through children's ideas.

A manual has been likewise prepared 'Creating better cities with children and youth' on how to conceptualise, structure and facilitate children's participation in the process of community development (cf. Driskell, 2002). The ideas and methods have been field tested and proven to

be effective in both developing and developed countries. After the realisation of working with the children, the questions asked were:

- What strategies most effectively enlist municipal and public support for children's ideas?
- How can children's participation in caring for the urban environment be integrated into on-going community functions?

To answer the above questions, the project took three phases approach: networking, research and action.

Networking was done at the municipal level identifying "child-friendly" municipal officials, social service workers, educators, architects, non-government organisation staff, grassroots activities, media people and anyone else who was willing to serve as an advocate for children's interests. The communities where the process was most likely to succeed were selected and a base support was built up so that when children were engaged in the activity, at least some of their ideas are realised.

In all countries, north and south, the study found a large gap between the rhetoric of international agreements and the reality of authorities' provisions for children. Some of the issues faced were officials' failures to respond to communication, direct dismissal and misuse of power. Examples mentioned are administrator's reappropriation of the fund designated for community-based planning and even use of physical force.

To understand the existing situation of the study area, to see how these places currently function for the young people who live there, a *research* phase was also started. It was necessary to understand what currently exists in the community in terms of resources and risks, and how young people perceive these. Collecting maps, aerial photos and demographic data about each community, observation of the community life and young people's activities in public spaces were studied. Methods such as drawing, conversations, small group discussions, child-led tours, child-taken photographs and commentary, interviews with children helped the process. Interviews were also conducted with the parents, community leaders and city officials to understand their perception of children's needs and how their policies affect children's lives.

This phase of the project was termed as challenging in terms of the result is not visible physically. Hence there is an inclination among the development agencies and government offices to dismiss this phase as research is a costly diversion from the real work of providing basic services. Reversely, GUIC is based on the principle that the research phase is a necessary

foundation that makes possible the third phase of children's participation in planning and improving their urban environment.

The third phase which would determine the real success of the project with its tangible outcome is children's participation in community *action*. The dominant attitude of the authorities in the 1970s disregarded the children's views and the project was not easily implementable. By collecting the research reports and synthesizing recommendations for child-sensitive urban planning in a book 'Growing up in cities', Lynch (1979) has provided the starting point for the research with the children. Hence in the new projects, the new rhetoric of children's participation is emerging. In different sites, young people and children have started actions to address the prevailing issues in their community. This also supports the concept that research and action should go hand in hand when it comes to community issues. As Chawla (2002) saw the need to work again in the same areas to witness the changes in the sites after more than two decades, it is important that this process continues again in the recent times so as to complement the findings and add more dimension to the existing findings.

The major leap from the 1970s project towards the new project is that understanding the situation is not enough and action has to be taken to bring about a change. The contemporary problems and urban issues are impacting the children's lives in the long term. The findings were such that the priorities that children express are conditions for making cities more liveable for all ages. Children showed that they have serious, well-considered ideas to contribute. They responded with realistic recommendations for community improvements. The ideas put forward by the children:

- Small space improvements – clean up trash, renovate plazas, plant more trees.
- Beyond possible improvements – clean up a polluted river, reduce traffic or provide jobs.

We can clearly see that and also mentioned in the book (Chawla, 2002, p. 32), "these large-scale suggestions can be dismissed as impractical only if the concepts of sustainable development and social equity are dismissed as well."

'Growing Up in Cities,' as an evaluation of the neighbourhood done by 10–15-year-olds in terms of the indicators of environmental quality shows the core challenges of urban childhoods and what they consider as good place are listed in Table 5.2 (cf. Chawla, 2002).

Table 5.2. Children's perception - positive and negative indicators of the environment.

Positive indicators	Negative indicators
Social integration	Social exclusion
Cohesive community identity	Stigma
Tradition of self-help	Violence and crime
Safety and free movement	Heavy traffic
Peer gathering places	Lack of gathering places
Varied activity settings	Lack of varied activity settings
Safe green spaces	Boredom
Provision for basic needs	Trach and litter
Security of tenure	Lack of provision for basic needs
	Insecure tenure
	Political powerlessness

The most effective strategies for creating better cities are through the actual process of participation (which can be categorised as shown in the box below) and by helping young people (cf. Chawla, 2002):

• To listen to one another • To respect differences of opinion • To find common ground	Child rights
• Developing their capabilities for critical thinking • Evaluation and reflection • Supporting their processes of discovery • Helping them develop the knowledge and skills for making a difference in their world	Children's capabilities
• Awareness building • Collective problem solving	Social change

We can see in the above box that the effective strategies can be categories in the issues they approach to address concerning child rights, children's capabilities development and a catalyst for social change, hence suggesting a transdisciplinary approach.

In the Table 5.3, the methods are more or less same, and the age group of children ranges from 10-15 years old. In each of the examples shown, the major concept was the issues that has been observed and then using the similar sets of methods to evaluate each one with different perspective.

Table 5.3. Compilation of case study in the cities and the projects carried out with the children in the Growing Up in the Urbanising World project series.

Methods	Project	Theme
Community action program, children interview adults, children as consultants, photographs, field map	Our neighbourhood is like that! Argentina	Cultural richness and childhood identity in Boca-Baraccas, Buenos Aires
In-depth interviews, children's drawings, child led neighbourhood tours, photographs by children and focus groups	Contested worlds United Kingdom	Constraints and opportunities in city and suburban environments in an English Midlands city
Interviews, spatial mapping with children, workshops	Australian youth Australia	Aliens in a Suburban environment
Getting to know session – informal group meetings, Spontaneous role play, drawing maps, workshop with mayor	Children is a south African Squatter Camp Gain and Lose a voice South Africa	Children gain and lose a voice in a squatter settlement in Canaansland
Formal and informal observations, one on one interviews, children's drawings and walking tours, photographs	Tales from truth town India	Children's lives in a south Indian 'slum'
Interview observation, informal talks and photographs	Large but not unlimited freedom in a Nordic city Norway	
Spatial and behavioural on-site observation with interviews	Between fences United states	Living and playing in California city
Interviews and meetings with children and collective voices	Adapting during a time of great change Poland	A return to Warsaw

In the book, Creating Better Cities with Children and Youth (CBCWCY), the participatory planning process with the children is described as below (Driskell, 2002).

Getting started – this is getting the task underway, hence identifying who are to be involved, from where the funds and logistics will be arranged, choosing appropriate age group of the children, basically the background study.

Identifying the issues – this is when the project actually takes place, because someone identifies that there is a problem that needs to be addressed. Hence a thorough observation, study and evaluation is needed at this initial stage.

Planning for change – after the issues have been identified, plan for action has to be done. This stage is the beginning phase of any action research as well.

Taking action – this is the actual part of doing and achieving something through the process. in this part, involvement of the children as participant is most crucial.

Monitoring and reflection – after all the process, monitoring the plan's implementation as well as reflection on the whole process is essential. This will give a way forward and lessons learned from the process so that the long-term community action plans can be run more effectively.

Putting them altogether the Figure 5.1 is developed which is also similar to the figure developed as Participatory Action Research model (see Chapter 2.3). Here also, as monitoring and reflection is important part of the whole process, it is not put in the cycle but is rearranged at the centre denoting its role all the time.
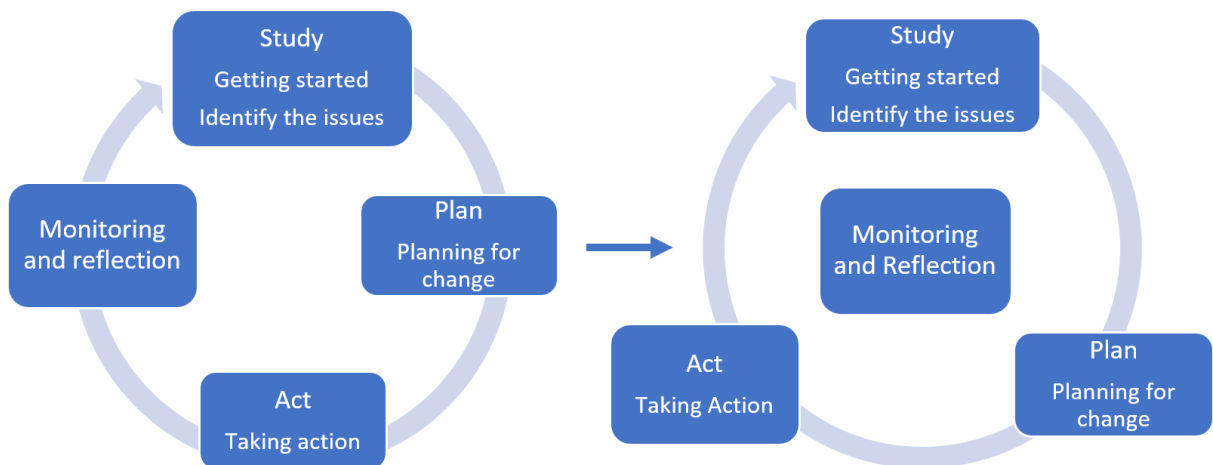
Figure 5.1. Putting together the steps of working with children from Creating Better Cities with Children and Youth (CBCWCY) (cf. Driskell, 2002).

In the book 'Place Making with Children and Youth', with the compilation of case studies from six different continents, various methodologies have been proposed for the process of place making with youth and children (cf. Derr et al., 2018). From designing schoolyards in Ontario to developing great neighbourhoods in Colorado, from open space planning in Boulder to designing a child-friendly neighbourhood in Dapto, this book shows how the methodologies are actually turned into action to bring about real changes.

Among the methodologies applied were interviews, informal observations, drawings, focus group and other group discussions, photo elicitation, dairies, child-led tours, maps, workshops and community events. Especially when it comes to working in the city spaces, photographs and maps were vital for envisioning children's concepts. Not all of them shall be used in one project and there is no limitation on how many of them shall be used, which provides the required flexibility and adaptability (Derr et al., 2018). This book is filled with practical ideas on how to work with children, whether with individual methods, project planning, analysing data and establishing and evaluating a long-term program. As a guide to new participatory

methods with children, this book gives a way forward for researchers to explore their sensitivity and willingness to contribute further to this field.

<u>Way forward from this Study</u>

These case studies are taken from a long-term effort of more than four decades to finding out best ways to working and researching with the children. In their continuous plan and action, they have developed and revised methodologies, given examples and provided innumerable methods and strategies to work and research with the children, giving examples from around the world. At the end of the latest book published in 2018, it gives a way forward for new researchers to build up and carry forward the research and contribute to new findings. Hence as an action-oriented approach with continuation, it gives way for more findings and changes and encourages new researchers to do so.

5.2   Case Study 2 - Cities Alive: Designing for Urban Childhood

This report from Arup is dedicated to child friendly urban design approaches. Arup is a consultant working internationally as a multidisciplinary team working towards sustainable development with equity, diversity and inclusion. Their main goal is to contribute to sustainable built environment. In 2017, they worked together with integrated city planning teams to prepare a report 'Cities Alive: Designing for Urban Childhoods'. The report moves ahead with the idea that children's spaces are not just the playgrounds. The following writeup is summarised from the same report (cf. ARUP, 2017).

This report provides a series of examples of successful projects carried out in different parts of the world – developed and developing countries included. The results show the range of benefits of different child friendly approaches to enhance the city for the children, supports the idea that the answer to a sustainable healthy city is a child-friendly city.

The key factors for child friendly spaces are everyday freedom and children's infrastructures. Independent mobility is the freedom to move around without adult interference. Children infrastructure is the network of spaces, streets, nature and interventions which make up the key features of a child-friendly city. They are important to make a more inclusive, equitable, healthy and resilient public realm. By providing connected, multifunctional, intergenerational as well as sustainable public spaces for cities, children's infrastructure can generate a substantial range of benefits to all urban citizens. Streets and the spaces in front of the houses are considered to be the key focus area for this. On average, these spaces make up about 25% of a city's space

and also have a great potential to encourage everyday freedoms and social interactions. Again, highlighting the point mentioned previously, children's spaces are not just the playgrounds but the overall environment that they are exposed to, not just parks but the child's everyday journey – routes to and from the school or to other community facilities and recreational areas.

With reference to urban childhood with a focus on child friendly cities and spaces, it expands its horizon in the domain of public spaces as the platform for sustainable development as it encompasses the global future. The needs, experiences and views of children should be in the centre stage in response to the challenges faced by urban areas. The report states that how children experience cities and the specific motivation for child friendly approaches varies from place to place and must be customised according to the cities' key drivers - cultural political, socioeconomic and environment. Nonetheless, the underlying challenges are often the same and similar methods could work globally. The changing urban context has five core challenges of urban childhoods: traffic and pollution; high-rise living and urban sprawl; crime, social fears and risk aversion; isolation and intolerance; and inadequate and unequal access to the city. Whereas child-friendly urban planning can help to achieve city goals and tackle these challenges by strengthening the link of the built environment, the public realm, and children's wellbeing.

A set of key principles as well as specific recommendations are provided in the report to help achieve this. Case studies done across the globe showcase their relevance in different contexts, so a universally feasible document is obtained. The seven key messages that are shown in this report are:

1. The quality of life experienced by urban populations, and particularly by children will determine our global future.
2. Child-friendly urban planning is a vital part of creating inclusive cities that work better for everyone.
3. Focusing on the needs of children can help act as a unifying theme for the promotion of progressive ideas and ambitious actions.
4. Children's infrastructure can help to enhance the economic value and long-term viability of the urban environment.
5. Providing multifunction, playable space – beyond the playground – can enable everyday freedoms and create a public realm for all age to enjoy together.

6. Interventions at the neighbourhood scale offer the greatest potential to create a children's infrastructure network that allows safe and enjoyable journeys.

7. Decision makers should be opportunistic and strategic and integrate child-friendly thinking into all aspects of city making.

Categorised in different themes, the interventions were done globally and are represented as case studies of each city. The public domain thus plays an important role in achieving desirable childhood. This global perspective with common themes is an important find in the field of children's spaces. All the cases are done in open spaces of the city highlighting submissively the importance of public spaces for the children. The themes covered were health and well-being, local economy, safety, stronger communities, nature and sustainability, resilience, a catalyst for improving cities and finally summarising them, a child-friendly urban planning approach is presented. According to the themes and children's experience as well as benefits and potential are given below in Table 5.4.

Table 5.4. Case Study Projects. Arup - Cities Alive Report.

Theme	Benefits	Potential	Project
Health and wellbeing	Physical activity Mental well-being Accessible activities Intergenerational activities	Accessible and intergenerational activities Encouraging physical activity through everyday freedoms Strengthening evidence for healthier urban environments	Barcelona superblocks, Spain The liveable cities project, India Belfast healthy city, UK.
Local economy	Retention of families Vibrant destinations Attractive developments Space saving	Attractive and vibrant spaces for families Saving space and supporting mixed activities Stimulating regeneration through playful interaction	Darling Quarter, Sydney, Australia River district, Vancouver, Canada Building Blocks for a child-friendly Rotterdam, Netherlands King's Cross Central, London, UK
Safety	Road safety Safe and active streets Perceived safety Addressing social fears	More child-friendly, less car-friendly Safe and attractive streets for active communities Addressing social fears and raising awareness	Children's priority zone, Bogota, Colombia Global street design guide, New York, USA Freiburg green city, Germany School zone improvement project, South Korea Crianca Fala project, Sao Paulo, Brazil
Stronger communities	Generating community Time spent together	Where children go, adult follow Interaction between young and old Spending time together for longer	Bicentennial children's park, Santiago, Chile Housing design for community life, UK

	Social interaction Inclusivity and accessibility	Integrating play into sensitive contexts Reconciling urban segregation	Rotterdam social infrastructure, Netherlands Banyoles old town, Spain Cantinho do Ceu Complex, Sao Paulo, Brazil
Nature and sustainability	Connection to nature Wilder natural spaces Risk and adventure Wellbeing and sanctuary	Wilder, more creative and flexible spaces A sense of belonging for the whole community Connected green infrastructure networks	Natuurspeeltuin de Speeldernis, Rotterdam, Netherlands Natividad Creek park, Salinas, USA Sanlihe river ecological corridor, Qian'an City, China
Resilience	Resilient citizens Climate resilience Responses to threats Multifunctionality	Repurposing playable spaces for climate resilience Providing for communities while responding to threats	New York City schoolyards, USA Copenhagen Cloudburst Plan, Denmark Disaster resilience parks, Tokyo, Japan Child-friendly floodable green space, Jakarta, Indonesia
A catalyst for improving cities	Unifying theme Citizenship Overcoming resistance Resourcefulness	Reclaiming streets through community action Making use of available resources Results that overcome resistance	Leeds pop-up parks, UK Protest for change, Amsterdam, Netherlands Car free experiment, Suwon, South Korea Tirana's agents for change, Albania Playground ideas, Melbourne, Australia

In most of the cities, the projects were initiated and supported by the government agencies specially by the will of the city leaders which can be seen below.

- Bogota – Mayor – political will
- Barcelona – city's department of mobility – Government
- Santiago, Chile - Santiago Metropolitan Park National Board of Gardens – Government
- Leeds, UK – city council – Government
- Ghent, Belgium – policy documents – Political parties
- Tirana, Albania – Mayor formed children's council

Elected city leaders have an important role to play and are at the authority of making quick and long-term decisions regarding city's infrastructure. The mayor of Tirana had such vision. Improving children's infrastructure and policy making was in top priority for this electoral term in 2015-2019. He worked with children and youth to make this vision work. Children helped to resolve initial resistance from adult residents on initiatives such as car free days, new parks and

play spaces, household recycling and the project "clean-up Tirana in a day". This built sense of ownership and responsibility in the children and created a foundation to introduce a children's council. This council ensured that children could take part in decision making and have an active role in shaping the city. Supporting interaction, creating trust and most importantly showing people from a young age that they have the power to influence and bring about a positive change in their community was possible with this intervention. (cf. ARUP, 2017)

In an interview, the mayor talks about how difficult it was to work with the adults while trying to bring change and how easily children understood and took part in the process. Thus, the change was actually possible when the mayor worked together with the children (Apolitical, 2017)

In Bogota, Colombia the elected bodies (mayor) have widely used public space and transportation system to bridge the gap between the rich and the poor. This citywide campaign has created opportunities for all the citizens and lessened the social division. Another approach taken by Bogota is the closing of access to cars on Sunday and holidays so that streets are used for biking, walking and various recreational activities. This also helped in raising awareness of the negative impact that car traffic has on people.

In a deprived area of Sao Paulo, the Crianca Fala project transformed public spaces through play and art with the help of the children to make an otherwise "too dangerous to go out" neighbourhood safe for everybody. An effort was made to encourage the officials to listen to children's concern. In Belfast, 7000 children were asked what they did and did not like about their neighbourhoods and what they would like to change. A report was prepared with their voices.

All the above-mentioned examples are given in the report of ARUP (2017).

Intergenerational interaction spaces help in the creation of sustainable communities. A mix of active as well as contemplative areas facilitate this, as the example is given that a community gardening could help the elderly to be involved and increase compassion and empathy in the young.

Hence the small-scale interventions suggested are Intergenerational spaces, pedestrian priority, neighbourhood mapping, traffic measures, community gardens, play streets, playable spaces, sense of ownership, cultural and heritage spaces, construction sites, multifunctional green infrastructure, playful encounters, wild spaces, multi-use community spaces.

Gap in the Report with Respect to the Research Aim

In this report, though comprehensive and the need of co-working with the children is highlighted, but details of the process is not shown. It emphasises on providing spaces for the children that are interactive, that engage them in daily lives and so on. However, this report does not focus on demonstrating methodologies used with the children in order to comprehend the participatory approach with the children.

For a successful action to be taken, a collaborative approach must be taken which involves city leaders and policy makers, developer and investors; and built environment professionals. More than the methodology, this report illustrates a comprehensive vision for child friendly cities. It says that working in the grassroots is important with few examples but does not go into details on how to take action.

5.3 Case Study 3 - Child Friendly Urban Design

In 'Child Friendly Urban Design' (Krishnamurthy et al., 2018), research approach was used to identify the common needs and concerns that apply to the upbringing of children in urban environments, in two cities, in Jerusalem and Eindhoven. Detailed study of different neighbourhoods in the cities were conducted.

Comprehensive study was conducted with interviews, workshops and self-observation as well. The recommendation provided is at different levels and complexity of intervention. It was witnessed that the issues raised were repeatedly on concerns regarding safety, awareness, maintenance and more family friendly spaces.

The themes of intervention were taken as street network, green spaces and playscapes. The recommendations were at three different levels of intervention. The smallest level of intervention meant that they could be achieved locally at the community, such as, installing playful street furniture, playful crossing and sidewalk games, temporary street closure, lighting, maintenance and awareness, flexible schoolyard as living school grounds, use of semi-private spaces, community garden and shared spaces. An intermediate level of interventions at the district or neighbourhood level suggested multiple use of spaces, neighbourhood child route, designing for flexible use, cycle path network, pedestrian network and public transportation routes, which required more planning. The highest and the most complex level of intervention at the city level took the approach of more strategic and intangible achievements such as

encouraging child participation and family friendly city strategy, which needs more comprehensive study and planning.

Gap in this Report with Respect to the Research Aim

Though this research provides a comprehensive study approach, the observation and interventions at neighbourhood level, the part of children's participation seems limited to asking them about their neighbourhood and not asking for issues and solutions directly. The research seems to be done for the children but not with the children. Though the intervention proposed from the study suggest and support the concept of children's involvement, the methods used are limited to self-analysis by the researchers.

5.4   More Case Studies

There are a few organisations working independently and also in collaboration with above mentioned case studies. Each of them is listed below in Table 5.5 with their field of work. These organisations, foundations or individuals have worked in various projects with and for the children. Their innumerable projects cannot be listed here, but to give an idea of their work, I have selected two projects listed below in Chapter 5.4.1 and 5.4.2.

Table 5.5. Organisations/Entities working in Child friendly environment (Rethinking Childhood, 2010; (Rethinking Childhood, 2010; Child in the City, 2015; Cities for Play, 2021).

Organisation/entity name	Owner/manager	Description	Scope of work
Rethinking childhood (2010)	Tim Gill, an independent scholar and global advocate for children's play and mobility	Website, consultancy and public speaking.	Share his work, embracing writings, research.
Child in the city (2015)	Managed by volunteer board	An independent foundation to strengthen the position of children in cities, promote and protect their rights, connecting people around these shared objectives and giving platform for the exchange of research results and good practices directed at the creation of child friendly cities.	Articles in website, newsletter, social media, conferences and seminars.
Cities for Play (2017)	Natalia Krysiak, architect, researcher	Cities for Play works with the public, private and civil sectors to create more playful and child-friendly communities.	Research, advocacy, community engagement and design at various scales.

5.4.1 Boechstrasse

Boechstrasse is the first functioning temporary play street in Berlin, Germany. There was a fall of playgrounds by a quarter in the last 20 years hence the concept of play street evolved with locals supporting the concept. This approach emphasises the need to be contextual, giving example that a play street in a village does not make sense as there are abundant spaces there and for something like this to be successful, residents' support is essential. Even in cities like Berlin, the minimum requirement of space per inhabitant for play is not adhered to. Therefore, it becomes important to use spaces differently and in a multipurpose way, especially in the urban areas (Weedy, 2019).

5.4.2 Antwerp

Three initiatives taken by Antwerp in Belgium for child friend neighbourhoods were (cf. Krysiak, 2021).

Living streets – which has a number of benefits for the residents encouraging social interaction between the adults and providing car-free space for children's play; streets with greenery with city council's support; streets that coordinate between eight or more residents are eligible for funding from the council, as well as allocate budget for seating, play structures and equipment necessary to create a 'living street'.

Car-free neighbourhoods – increasing children's outdoor play, free to roam around the neighbourhood, natural sense of community as parents and grandparents sit outside to watch the kids play out in the afternoons.

Creating a walkable playspace web – play not only on their doorsteps but play spaces throughout the neighbourhood are linked with pedestrian and cycling infrastructures to enable active mobility.

5.5 Conclusion from the Case Studies

Looking at wide range of cases, it is clear that a lot of flexibility of approach is required while working with the children. To mention innumerable list of interventions could be a daunting task but the core of each of these approaches seem to have the common themes. Hence, the findings of the case studies are summarised below.

- Networking, research and action as a vital key to conceptualise, structure and facilitate children's participation.

- Networking – municipal officials, social service workers, educators, architects, non-government organisation staff, grassroots activities, media people and anyone else who is willing to serve as an advocate for children's interests – build as much networking as possible. Elected mayors/ward chiefs have an important role to play – it is important to build trust and relationship with them while envisioning such projects. Hence, important at the beginning of the project.
  - Research – research gives opportunity to take meaningful action.
  - Action – action backed up by research helps to bring about a noticeable/desirable change.
- Children's capabilities were identified.
  - Children were able to identify types of open spaces.
  - Children were able to identify good places and bad places based on indicators.
  - Children were able to provide types of interventions needed to make good places, that too at different scales.
- The methods used in the reviewed case studies for working with the children are as follows in Table 5.6.

Table 5.6. Different methods on working with children as identified from case studies.

Participatory	Non-Participatory
Drawing	Self-observation:
Conversations	Ethnographic
Small Group Discussions, focus group	Storytelling
Child-led Tours	Formal and informal observation
Child-taken Photographs and Commentary	Spatial and behavioural on-site
Interviews – in-depth, informal talks	observation
Workshops – community action programs	
Child-led Neighbourhood Map/tours	
Children interview adults	
Children as Consultants	
Spontaneous Role-play	
Meetings for collective voices	
Getting to know sessions	

- Photovoice

Amongst the interventions, the methodology used to empower the youths was photovoice. This methodology gave an opportunity for the children to walk around their neighbourhood and discover new things. This observation could be presented through photographs as well as texts, which helped in giving voices to them. In the photovoice methodology, there was an opportunity for group discussions and the flexibility to alter the process as per the context.

Detail of this methodology backed up by philosophical and theoretical frameworks, and its use in the recent times is provided in the next chapter, where photovoice as a methodology for working with children is justified (see Chapter 6.6).

- Comparative table with findings and research gap from the case studies (see Table 5.7).

Table 5.7. Comparative table of all case studies showing scope, finding and limitation of the respective cases.

Cases	Findings	Gap
Case study 1 Growing up in an urbanising world Creating better cities with children and youth Placemaking with children and youth	Comprehensive tools were developed and were used to bring out genuine participation of children. Networking, research and action is important part of working/researching with children to make an impact. With series of new projects, the need of continuous of such action-oriented projects is highlighted.	A way forward of this project is needed. Continuation is identified, the pattern of the same is still not analysed. Realising this pattern of participatory approach with children could be a comprehensive addition to this field.
Case study 2 Cities Alive: Designing for Urban Childhoods	Projects planned in different scenarios, worked together with children. Participatory approaches are highlighted but participatory tools are not demonstrated in detail.	Children's involvement is not analysed. Detailed methods of working with the children is not presented.
Case study 3 Child friendly urban design	Research was influenced by researcher's prior knowledge; children's involvement was up to the sharing ideas.	Grassroot problems are hard to identify. More participatory methods to empower the children are necessary.
Case study 4, 5 Boechstrasse and Antwerp	Examples of practices with children are shown without much literature or research backup. Participatory approaches to bring about a change are used.	Follow on research/study is missing. Hard for the scientific community to benefit from such approaches.

- The things to consider while working with children are as follows:
  - Working in public open spaces is vital with city makers/decision makers involvement.
  - Age group of children – Most of the projects were done with low-income adolescents/children of age 10-16. Their perception of their environments – for identifying their ideas and energies in creating more liveable cities provides the support.

- Innovative urban planning practices – Child friendly urban planning can help to achieve city goals and tackle the challenges by strengthening the link of the built environment, public realm and children's wellbeing – thinking child spaces as more than playground.
- Methodological approach – For realising changes through children's ideas – involving young people/children to evaluate the place where they live and give input for improvements.
- Intervention at neighbourhood scale – Participation, putting children first, children as agent for change, contextual approach.
- Research and action go together – Test and trial is the way to succeed, continuation of the process is vital. The participatory planning approach with children resembles with the Participatory Action Research model (see Figure 5.1).

The process explained in these books, report and papers have been tested and, in many cases, success have been achieved in bringing about the change with children's participation. Hence, the example from these case studies will be used as references to validate my research approach and processes. In the participant ethnographic observation, this back-and-forth process of analysing the data set with the literature and case studies helps in authenticating the data.

6 Developing a Methodology

A methodology of working with the children will be developed at the end of this chapter. And this methodology will be applied in this research, as it is action research, to answer the first two research questions. Hence this chapter in itself is my research methodology design as well as in some parts result of my research. To make this chapter complete or successful, the result or the action process to answer my research question helped a lot. That means, and I conclude with the same note at the end, that when action research is conducted, it is not a linear process. Hence the literature review guided the research, to formulate the research questions; again, various methodological approaches studied helped to find more literature. The case studies showed prospects of working and researching with the children and provided a rethinking to the methodological approach and literature studied. This gave rise to a back-and-forth process. Philosophical and theoretical frameworks guided to formulate my research design as well as to develop a methodology on working with the children – the title of my dissertation being 'Planning open spaces with and for the children.'

6.1 Methodological Gap

Based on 'The Case, Reviewing Concepts and Concise', 'Research Area' and 'Case Study' chapters, the prominent research gap was established. In the Chapter 2.2 - Methodological Approach, it was stated that this research will take the approach of Participatory Action Research. From literature review and case studies, it was observed that though in the recent years, participatory methods have been applied in community planning with the children, yet a comprehensive methodology has not been developed for the same. This research focuses on urban/community planning issues, different types of open spaces and their functions. It addresses the need of children's participation in designing/planning or having a voice on the issues related to open spaces. This is based on the ground of child rights and their basic needs from their environment. Combining all these together, we can see in the Figure 6.1 below that there is a gap in the literature regarding how to make all of this come together. For example, how to tackle urban issues with the help of the children and how children can benefit from this participation. Hence, a new model is desired.
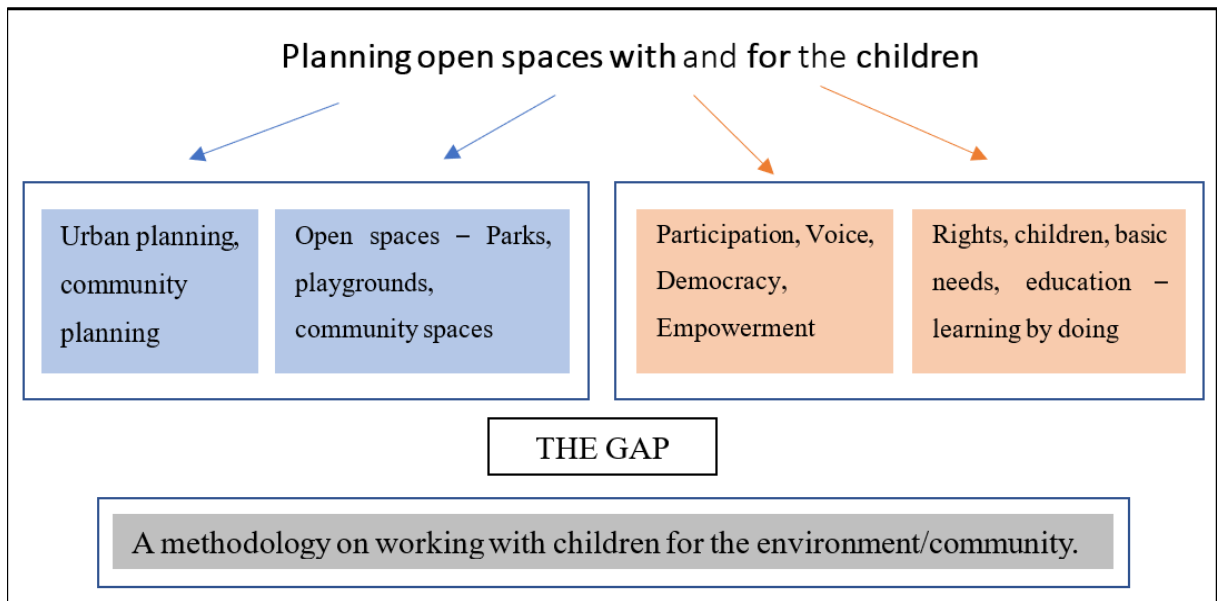
Figure 6.1. Gap in the research: Methodology to work with the children.

Interlink among all the features shown in Figure 6.1 were closely examined in the previous chapters. It has been realised that a transdisciplinary approach will be needed as a methodology as per the demand of urban planning and children's environment. Practices of working with children are being prominently practiced in many cities of the global north as well as few cities in the global south. Milestone changes have been accomplished which has already been mentioned in the literature review and case studies. There were lots of methods which were site contextual but there was not a single methodology which could be taken as a framework for working with children. Many studies discuss about participatory planning, yet they leave it to the stage of listening to the children and considering their needs (see Chapter 1 & 4). Many studies as such claim that children are the catalyst for urban innovation and urban planning, yet the measures that can make this happen are still in the process of realisation.

6.2 Filling the Gap

6.2.1 Philosophical Approach

Methodology refers to the principles underlying particular research approaches, as distinct from methods, which are ways of collecting data. Methodological framework should justify the methods used for the research as well as qualitative research should be situated within this framework. Without methodological frameworks, the rigour and value of qualitative research can be weakened (cf. Oxford University, 2018).

Neuman (2014) argues that philosophical foundation is necessary for a social researcher. While all the scientific research rests on principles of ontology and epistemology, whether or not the researcher acknowledges them. Hence, though not a necessity, but by becoming aware of the assumptions, one can better understand own research choice and the base of the research approach. This aids in concretising the research based on its underlying philosophy.

"Different philosophical stances, driven by varying core assumptions about epistemology and ontology, normatively inform their practitioners in terms of aims and requirements. Yet the impact of such philosophical variation usually remains unnoticed in published accounts thereby fuelling ambiguity and controversy" (Cassell & Johnson, 2006, p. 785).

In this research, for philosophical framework, Lewin's action plan (mentioned earlier); Vygotsky's, Piaget's and Dewey's relation between man or a child and environment is considered (cf. Adelman, 1993; Sikandar, 2015). Freire's (cf. 1970) 'Pedagogy of the Oppressed' is taken as the critical consciousness and driver of the research. They were taken as starting point for the analysis as they all represented the common ideology behind the development of human beings.

I have extracted the following writing from two documents about Dewey's work and philosophy – 'Towards a Flexible Curriculum – Dewey's Theory of Experience and Learning' by Berding (1997) and 'John Dewey and His Philosophy of Education' by Sikandar (2015).

A child lives in a world of nature and man. Education should be medium to find balance between freedom and control, between a child as an individual and as a social being. Dewey claims that education and life are one and the same thing. An individual who lives in an environment adjusts oneself to the ever-changing complex demands of that environment. At the same time, the environment is also constantly reshaped by that individual and his actions.

Experiencing and learning take place in socio-cultural and political contexts. A school can be a place of practice where the participation along with interaction and communication among the individuals and groups on all level is realistic. Hence there should be an ever-renewed balancing of individuals and the society in the centre of the educational process.

- In education, not transmission and control but sharing is the key word.
- In education, not transmission and control but invitation is the key word.
- In education, not transmission and control but participation is the key word.

Dewey's philosophical belief focuses on the development of a child as a valuable member of the society – the society which is in equity and freedom, and practices democratic qualities and ideals. For a child to belong to a society, the education he/she gets should equip him/her with social competence. The aim of the education should thus be a link between a child's life and his experiences. Unless these two go side by side, Dewey claims education to be useless (cf. Sikandar, 2015). The education process "… has two sides – one psychological and one sociological; … neither can be subordinated to the other or neglected without evil results following" (Berding, 1997, p. 27).

Education should be progressive. It should take the constructivist approach. As the communities to which a child belongs is at constant change, education cannot focus on today's challenges only. The school as an important social institution should 'educate for change'. He strongly believed that change brings new opportunities and that we need to embrace these and think of new ways to help our children become socially responsible rather than cling to the past and parent/educate using older methods. His theory saw education as child-centred, active and interactive and that it should involve the child's social world and the community. Children need to interact with other people, work both alone and cooperatively with their peers and adults.

Likewise, Piaget believed in the provision of a stimulating environment for children to explore (cf. Singer & Revenson, 1978). He proposed that child is an active learner and must be given opportunities to explore, discover and experiment. He emphasised on stages of a child's development which was age specific and a result of the interaction of hereditary and environmental factors. He discovered that from the age of 11 years on children become critical thinkers. The main idea of Piaget's development theory of learning and thinking is that both involve the participation of the learner, constructing and reconstructing the knowledge.

Supporting Piaget's concept but stepping a bit further, Vygotsky believed that child is not a solitary discoverer of knowledge but saw the child learning within social interactions with others (cf. Singer & Revenson, 1978). He saw the role for adults in extending children's learning beyond what they were capable of independently. His socio-cultural theory of cognitive development defines that, children in different cultures learn ways of thinking that are necessary to live in their own culture and community. He saw that social interaction and language had a major influence on the development of children's thinking (McLeod, 2020).

All the above philosophical stances strongly provoke the need to analysis the children's environment considering children as part of it and how both are interlinked and interdependent.

Lewin's conclusion after a series of practical experience 'no action without research, no research without action' (cf. Kindon et al., 2007) inspired this research. Lewin was interested in helping the minority groups to seek independence, equality and cooperation. This concept was also core to Freire's (cf. 1970) 'Pedagogy of the oppressed'. He viewed traditional education as the banking concept where the student is only receiving, filing and storing the deposits of the teacher. To improve human condition, social conflict whether religious, racial, marital or industrial should be resolved. He believed that the key to solving social conflict was to facilitate planned change through learning and enabling individuals to understand and restructure their perceptions of the world around them so they become participants rather than objects and acquire new knowledge and also develop critical awareness of their community (Wang & Burris, 1997).

6.2.2 Theoretical Approach - Bronfenbrenner's Ecological Systems Theory

I have chosen the Bronfenbrenner's Ecological Systems Theory as a backdrop of my study as it looks at a child's development within the context of the system of relationships that form his or her environment. This system defines complex layers of environment each having an effect on a child's development. Bronfenbrenner's revised bioecological system defines the process of human development more accurately (Vélez-Agosto, Soto-Crespo, Vizcarrondo-Oppenheimer, Vega-Molina & Coll, 2017). It emphasizes that a child's own biology is a primary environment fuelling her development. But the interaction between the factors in the child's maturing biology, his immediate family or the community environment, and the societal landscape fuels and steers his development. It looks at a child's development within the context of the system of relationships that form his or her environment, as shows in Figure 6.2. We must, hence, look into not only a child's immediate environment but also at the interaction of the larger environment, as well as other underlying factors at larger level. The Bronfenbrenner's structure of environment is as elaborated below (Vélez-Agosto et al., 2017):

Microsystem – At this level, bidirectional influences are the strongest and affects the child intensely as it deals with one-on-one interaction, especially with parents, family, school, neighbourhood etc. Hence, parents might directly affect a child's beliefs and behaviours, and reversely child also affects the parent's beliefs and behaviours.

Mesosystem – This is the layer where the microsystems of the child are connected. For example - a parent's relationship with the child's preschool teacher or the nearby shopkeeper where they buy cookies.

Exosystem – This layer is indirectly affecting childhood. The child does not function directly at this level. He/she may not be involved directly but feels the positive or negative impact involved with the interaction with this system. For example, parents' workplaces, their social network, other community groups etc.

Macrosystem – This is the outermost layer in child development. This layer comprises of cultural values, customs and laws. This may be considered as common belief system of the society has a whole. Hence a child is affected by the larger principles of macrosystem influencing throughout the interaction of all other layers.

Chronosystem – This is represented with certain events happening in a child's life that has direct effect in their lives – personal or even global changes related to their rights or even pandemics.

Chronosystem
Changes over time

Macrosystem
Social and cultural values

Exosystem
Indirect environment

Mesosystem
Connections

Microsystem
Immediate
Environment

CHILD
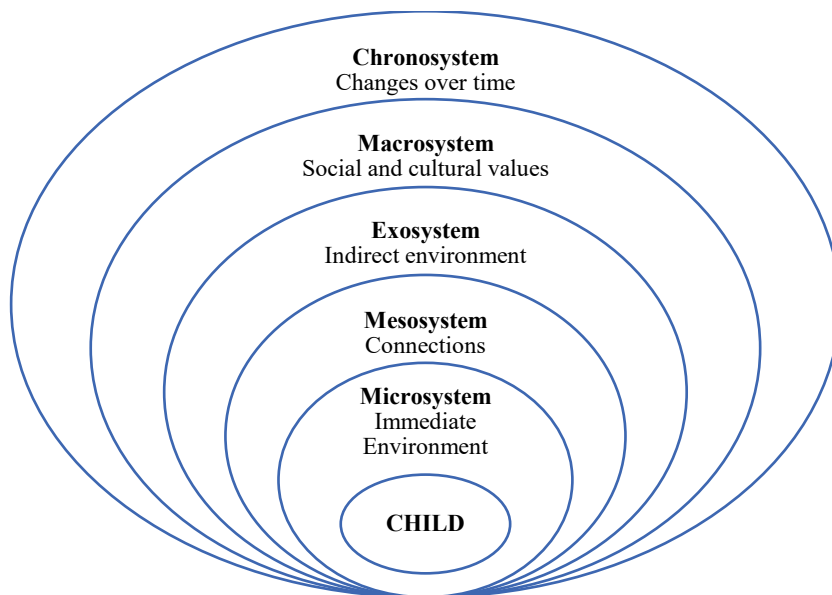
Figure 6.2. Ecological System Theory (The Psychology Notes Headquarters, 2019).

While micro and meso environment are more related to the relationships with others, exosystem is related to the places around them and macro system to the community values. Open spaces are vital for these purposes. This ecological system shows how a child though being an individual is also influenced by societal existence. And in the process of developing, he/she also influences the surrounding they are exposed to. It is therefore important to consider how this unavoidable relation could be made better so that it is beneficial for both. This is where community planning comes into play. Though this was also the theory of Dewey and Vygotsky (cf. Singer & Revenson, 1978; Sikandar, 2015), Bronfenbrenner goes deeper in analysing the environments in different levels.

6.2.3 Modern Approach

Along with many attributes to city planning, Jane Jacobs have advocated for bottom-up community planning. She challenged the traditional planning approach that relied on the judgment of outside experts and advocated that local expertise is important for community development. In the process of doing so, she also encouraged the local residents to familiarise themselves with the places where they live, work and play (Jacobs, 1961).

How you experience, see or feel a space is a unique experience. As Lynch (1960) writes in his book 'The image of a city', he emphasizes that city is a construction in space that can be perceived in the course of long spans of time. As each experience is unique and depends upon its surroundings, different events and time, an individual's image of his city is in his memories and meanings. Another crucial element of a city is the people and the activities. As we experience and observe and understand our city, we are one of the elements of it too. Hence, either we are researchers or observers, we are also among the participants (Lynch, 1960). A two-way process between the environment and its observer can only create an image of the environment.

The city might look the same in generally over the years, but it is ever changing in detail. It is not up to any individual or system to exercise control over its growth and form. The changes will be gradual and there is no final result (Lynch, 1960). Hence a continuous working process is required to bring new ideas to facilitate a city as seen in Figure 6.3.
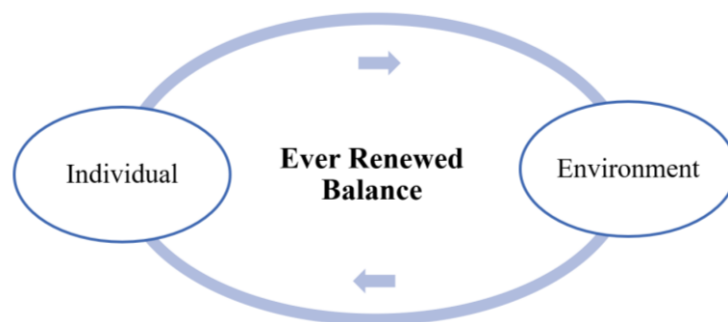
Figure 6.3. The mutual relationship between an individual and his/her environment: derived from Dewey (cf. Sikandar, 2015); Lynch (1960); Piaget and Vygotksy (cf. Singer & Revenson, 1978); and Bronfenbrenner (cf. The Psychology Notes Headquarters, 2019).

A desirable model of environment education as compared to traditional approach justifies this philosophical approach as well as the theoretical scenarios presented above, as shown below in Figure 6.4 (Hart, 1997). Traditional environmental education model covers the natural environment study. The desired environmental education model proposed by Hart (1997)

includes social studies, history and geographies, political knowledge covering social problems, local history and culture as well as art for aesthetic appreciation of the environment as shown in Figure 6.4. For such an overall environmental observation and learning, children must be exposed to the real world or outdoor environment as well as be informed about local and global issues which can be achieved by practiced participation.
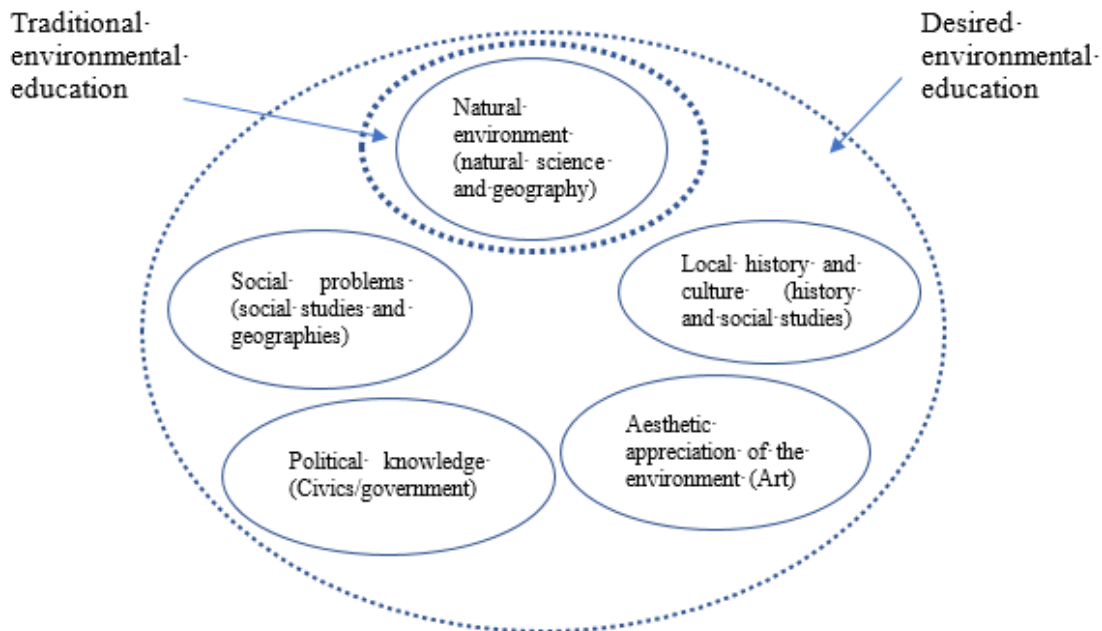
Figure 6.4. Desired Environmental Education Model compared with the Traditional Environmental Education Model (Hart., 1997).

6.3   Frameworks Leading to Practice – Critical Analysis to Develop a Methodology

The philosophical backdrop along with the theoretical background has justified the need for working together with the children and taking them as an integral part of their environment. But to make this a success in reality, research methodology must be so developed that the theoretical underpinning could be brought to the surface and applied in the field. This gives opportunity to try this contemporary approach to community and urban planning and hence give way for more practices.

Theories on children's participation are often based on structural organisation within the formal setting. When this happens, participation in true sense as 'organic participation' holds its way back. It is related to Gramsci's concept of 'organic intellectual'. 'Organic intellectual' refers to the concept of development of individual by being actively involved in the community in the contextual manner, obtaining expertise and knowledge through the process and then using it to engage the communities into action for social change (cf. Malone & Hartung, 2010). Human beings as 'thinker' cannot be separated from human beings as makers. This 'thinker' has a

conception of the world, a conscious line of moral conduct and also to modify it or to empower their particular communities. Gramsci further argues that every individual has these intellects and rational capacity to become 'intellectuals' but the surrounding and social construct has a huge role to play for this to emerge (cf. Malone & Hartung, 2010).

This research from now on explores such engagement which is not organised but is developed through prolonged practices, that exists but are not explored and thus giving children opportunities to think and empower themselves and bring about a social change.

"Participation is not a political campaign that puts children first...but a process of creating a society that is inclusive of young citizens" (cf. Driskell, 2002, p. 32).

Young people's participation does not mean that adults cease to be involved and it also does not mean that whatever children say are taken into action immediately (Thomas, 2007). Participation opens up a different type of involvement. It is a process of partnership between young people and adults where they share ideas and come to common grounds. This means that both the parties are involved, and one does not overpower the other. Innovative methods should be tried to make participation in daily lives possible (Chawla, 2002; Hart, 1997; Driskell, 2002; Derr et al., 2018 ; Malone, 2011).

In neighbourhood planning, it is particularly difficult to break the wall of the government officials' rigidity to include diverse voices, children's views are supressed in the weight of social and economic forces (Thomas, 2007). Contrarily children participation may also act as an initiating force for change where even adults have little opportunity to influence community decisions. This has been addressed by Hart giving example of Sarvodaya movement in Sri Lanka. In many villages during this movement, children were the starting point of community participation and later this participatory approach was able to impact the adults (Hart, 1997).

Public life in neighbourhoods and communities, where children's autonomous activity may meet a variety of reactions from adults and authority figures – children may be ignored, disapproved of or even feared, or they may be regarded as in need of protection and sequestration, but they are rarely accorded the same respect and attention as adults. Community and civil society organisations are where children are rarely present except as appendages of adults (Thomas, 2007). The inclusion of children in political decisions in most places is tokenistic or decorative at best and manipulative or deceptive at worst (Chawla, et al., 2005; Driskell, 2002).
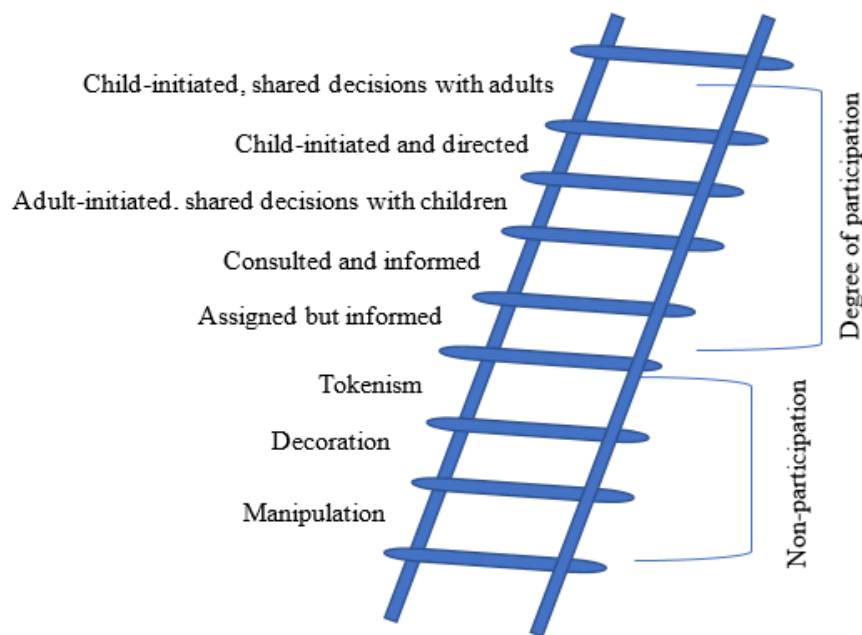
Figure 6.5. Hart's ladder of participation: children's participation at different levels (Hart, 1992).

Hart's ladder of participation with eight rungs shows different levels of children's participation. The bottom three rungs – Manipulation, Decoration and Tokenism are considered as non-participative (see Figure 6.5). The upper five rungs show different levels of children's participation from totally child-initiated projects to consultation and duties assigned to the children by explaining them about the project. These rungs show genuine participation (Hart, 1992). Nonetheless, it is not clear on how the participatory approach works in reality. As Hart (2008) argues in his recent paper, his ladder of participation should not be used as a comprehensive tool and each culture needs its own way of working with children. He argues that children in eastern and western society are completely different in their approach in the sense that the former is inclined towards collectivism and the latter individualism. Hence to use the same tools for a participatory approach in this scenario is not possible. Also, the independence as seen in western society is different from the eastern one. He also argues looking at different situations in Asian countries that when children are participating in projects, their participation is not voluntary but compulsory and he doesn't understand how this could mean a true participation (Hart, 2008). He further emphasizes that in the minority world, he himself living and working there, over the past century, most children have been segregated from everyday participatory activities with adults in their communities. Children all over the world traditionally learned with adults through a kind of 'apprenticeship', or participation, in work. This though still existing in majority world, it has been greatly reduced in minority world.

He urges to take his ladder as a metaphor rather than considering its use as a whole new framework of participation. Also, it is clear that the bottom three rungs - Manipulation – Decoration – Tokenism cannot be taken as participation (Hart, 2008). He even urges the researchers to fill in the need for models while working with children, prioritizing everyday involvement rather than institutionalised settings. As an alternative to the ladder and after a review of three decades' worth of children's participation in practice, Francis and Lorenzo (2002) identified seven realms of children's participation.

1. Romantic realm – children as planners – Projects dating back to the 1960s and 1970s which promote an image of children as able to envision and create their own environments without the involvement of adults.

2. Advocacy realm – planners for children – Projects where children are predominantly planned for, with their apparent needs advocated through adults.

3. Needs realm – social science for children – Predominantly projects by urban planners that are increasingly moving towards more 'research based' approaches that can be identified with the social science of children.

4. Learning realm – children as learners – Projects which involve teachers and environmental educators without necessarily utilising research knowledge. The focus is on the process of changing perceptions and skills rather than physical places.

5. Rights realm – children as citizens – Projects are closely related to the United Nations and similar international organisations, where the focus tends to be on children's rights rather than on environmental needs.

6. Institutionalisation realm – children as adults – An increasingly popular approach, it relates to international child advocate organisations and city officials who have been forced to involve children.

7. Proactive realm – participation with vision – This is children's participation with vision, relating to projects that strive to find a balance between focusing on empowering children through spontaneous and child-centred modes of participation, and focusing on making substantial changes.

This new approach to realms of participation departs from the ascending ladder approach thus, not emphasizing on the hierarchical role of different levels. According to Lansdown (2001), these approaches however can be categorised into:

1. Consultative – adult initiated, led and managed, lacking any possibility for children to control outcomes.

2. Collaborative – adult initiated, involving partnership with children, empowering children to influence or challenge both process and outcomes, allowing for increasing levels of self-directly action by children over a period of time.

3. Child-led – the issues of concern being identified by children themselves, adults serving as facilitators rather than leaders, children controlling the process.

While each form of participation is meaningful, the collaborative one is most common, and it carries a wide range of participation. Child led participation might be the ultimate goal as romantic participation, but children need to learn the skills, have motivation and confidence for this type of participation to take place. This can be achieved slowly by the involvement of the adults. Also, different levels of participation are possible at different phases of projects as well as in different scenarios, for example, a child-led participation can take place with the parents in the family and collaborative one can take place in an institution. Looking at participation at different levels as well as aspects, it can again be connected with Bronfenbrenner's ecological system (see Figure 6.2). Hence, it is a more complex structure than a linear growth in the level of participation.

Driskell mentioned (2002, p. 46), "One of the most effective strategies for creating better cities is through the actual process of participation: helping young people to listen to one another, to respect differences of opinions, and to find common ground; developing their capacities for critical thinking, evaluation and reflection; supporting their processes of discovery, awareness building, and collective problem solving; and helping them to develop the knowledge and skills for making a difference in their world."

According to Thomas (2007), a theory on child participation should have a broader prospect with intergenerational relations. New participatory practices should emerge, conjointly with adults and autonomously (Thomas, 2007). Lynch's (1977) approach of involving adolescents in evaluating their own environment and making recommendations for improvement might not have been taken seriously by the city officials at that time, it certainly is being approved throughout the world with the ratification of UN Convention on Child Rights (UNCRC) (Lynch, 1977). A set of participatory clauses requires adults to see children and youth as partners in planning their own wellbeing (Hart, 1997).

Participatory research methods aim to ensure that participants feel encouraged, significant and comfortable in expressing their ideas. Principles guiding children's participation should be Local and Relevant, Transparent, Interactive, Voluntary, Respectful, Responsive and

Accountable, Reflective, Educational and informative, Child friendly and Inclusive, Personal, supported by training, Safe and sensitive to risk, Transformative and Sustainable (Chawla, 2002; Driskell, 2002; Designing with Children, 2011).

As many decisions that affect people's lives are made within the course of everyday life rather than through political structures of government and governance, only everyday social participation represents a key form of active citizenship (Percy-Smith & Thomas, 2010; Percy-Smith, 2010). Instead of providing platform for participation in a formal structure participation should be taken as embedded in children and young people's daily lives and activities (Percy-Smith, 2010). Also, only a few are involved in public or formal decision-making fora. So, this approach seems inclusive to recognise children's capabilities (Leonard, 2016).

As much as children need safe environment and their basic needs to be fulfilled, they also need to be exposed to the reality of their environment. Hence participation shall be viewed as having equal opportunities to take part and be involved in the life of the community, organisation or projects and feel valued for the contribution thus valuing own selves (Percy-Smith, 2010).

6.4   Derived Methodological Approach for Working with Children

Since the late 90s and early 2000s, participation of children was not frowned upon but to find out different ways to make it work was an issue. Many researchers analysed and tried methodologies and highlighted the limitations (Horelli, 1997; Driskell, 2002). The benefit of engaging children is not only for their good, but it is a catalyst for making the communities and cities better for everybody through their creativity and capability (Hart, 1997).

Many participatory methods (drawings, interviews, workshops, photographs etc.) are used in the past few decades to bring out children's creative expression in order to use their ideas in the design and planning of their local environment (Chawla, 2002a). Among the approaches used, Participatory Action Research (PAR) has become an effective tool in bringing voice of the oppressed or marginalised population to bring about a social change (Chawla, 2002; Kindon et al., 2007).

As the fundamental right of every citizen, participation can change one's life and the life of the community that the individual resides in. As specified by Hart (1992) in his essay 'children's participation', participation is the means by which a democracy is built and the standard against which democracies should be measured. A democratic nation must have its citizens

involved particularly at the community level. Rather than thinking about an ideal environment for the children, a focus should be on how in the existing situation their environment could be made better by encouraging their participation (Hart, 1992). The understanding of a democratic participation and the confidence to participate can only be acquired through gradual practice and cannot be taught as an abstraction. To expect the children to become mature suddenly at a specific age is unrealistic. Hence, children should be involved in meaningful projects with the adults which will help them develop the skills and be responsible and competent (Hart, 1992).

In interdisciplinary approach participant and experts cross unrelated discipline boundaries to meet the project goal. Transdisciplinary moves beyond that. It involves the stakeholders and decision makers throughout the project not only as beneficiaries but also as contributors in continuous and mutual interaction with experts (cf. Meyer, 2011). PAR is conducted by a partnership of systematic inquiry by researchers, professionals' practised intervention community members and stakeholder's participation in decision-making (Hughes, 2008).

Lewin's conclusion after series of experience was there is 'no action without research, no research without action' (cf. Kindon et al., 2007). He also developed a model of change – 'unfreeze-change-refreeze,' which adds another dimension to this research (cf. Adelman, 1993). It shows that anything that had been previously working might at some time become unsuitable in the contemporary period. To improve human condition, social conflict whether religious, racial, marital or industrial should be resolved. He believed that the key to solving social conflict was to facilitate planned change through learning and enabling individuals to understand and restructure their perceptions of the world around them (Adelman, 1993).

The child clubs of Nepal, for example, are exclusive rather than inclusive which makes it difficult for the marginalised children (poorest non-school going children as well as disabled children) to get benefits from them as well as their voices will go unheard (Rajbhandary, Hart, & Khatiwada, 1999). This approach makes the students adaptive rather than transformative. Their critical consciousness decreases as their role as receptors increases, thus, they accept the world as it is and simply adapt to it rather than intervene as the transformers of the world. As an innate nature of humans, they may sooner or later realise that the banking system is contradictory to their existence and fight for their liberation. But the humanist approach believes in becoming partners with the students and have faith in their creative power. Hence, one must

work towards achieving this at the beginning of the learning process (Freire, 1970). Dewey's philosophical belief was that the development of a child must take as a valuable member of the society – the society which is in equity and freedom, and practices democratic qualities and ideals. This dependency of individual and their environment seeks a transformation into yet an ever-renewed balance (cf. Sikandar, 2015).

The flexibility of approaches used to facilitate participatory tools is important. It should be adaptive to the context as well as to the specific group as not all tools work the same with everyone (Kindon et al., 2007).

Through this research, a cyclic process will be developed which could be used as a framework for further research in this field (Driskell, 2002). This idea is ever supported by all the philosophical backdrop of this research – Dewey's 'relation of man and environment', Lewin's 'action and reflection' and most importantly the main idea of Participatory Action Research (briefed in earlier chapters).

The methodological approach of the process should hence be:

- Democratic – once we are ready to listen to the children and their needs and to include them in decisions relating to their lives in full-fledge, the process could be envisioned.
- Transdisciplinary – working with children cannot be accomplished by one field or discipline. Children are diverse in age, physical and psychological needs, educational development, social and cultural background, hence the approach should be such.
- Action Oriented – no matter how much studies are done, until we come out and about and really work with the children on site, we cannot achieve this goal.
- Critical and Reflective – while taking an action, there should be thorough knowledge of the subject matter as well as the capability of thinking critically about it. After an action is taken, there should be a broader mind to reflect upon those and then plan ahead for the next action with those reflective process.
- Transformative – when an action is conducted, there should be a noticeable change to reflect on the process that has been carried out. Only when the situation is transformed, there could opportunities to see new possibilities and interventions.
- Educational – the actions taken with the children should always be educational and if the children are engaged and they enjoy the process, there is natural learning going on.

- Flexible – as the situation is different in each society, every culture and every individual, the tool that is developed should be flexible. Researchers must be able to update and submerge them into the context rather than taking an alien approach.
- Adaptive – ensuring its flexibility, it should then be adaptive to response to the context.
- A continuous process – an emphasis should be given for the practice to be cyclic. And when something is not working, it should be stopped, analysed, solved and then continued back. The action should be continued to make bigger and wider impacts.

6.5 Developing a Model from the Derived Methodological Approach

Combining the methodological approach to working with children and when this approach is taken, a model can be developed which comprises these practices as a whole. The figures below show a general outlook of the process that shows a dynamic, comprehensive yet an adaptive model. The concept of ever renewed balance between the individual and the environment also support this concept. The core of Participatory Action Research approach is applied in this model of STUDY-PLAN-ACT.
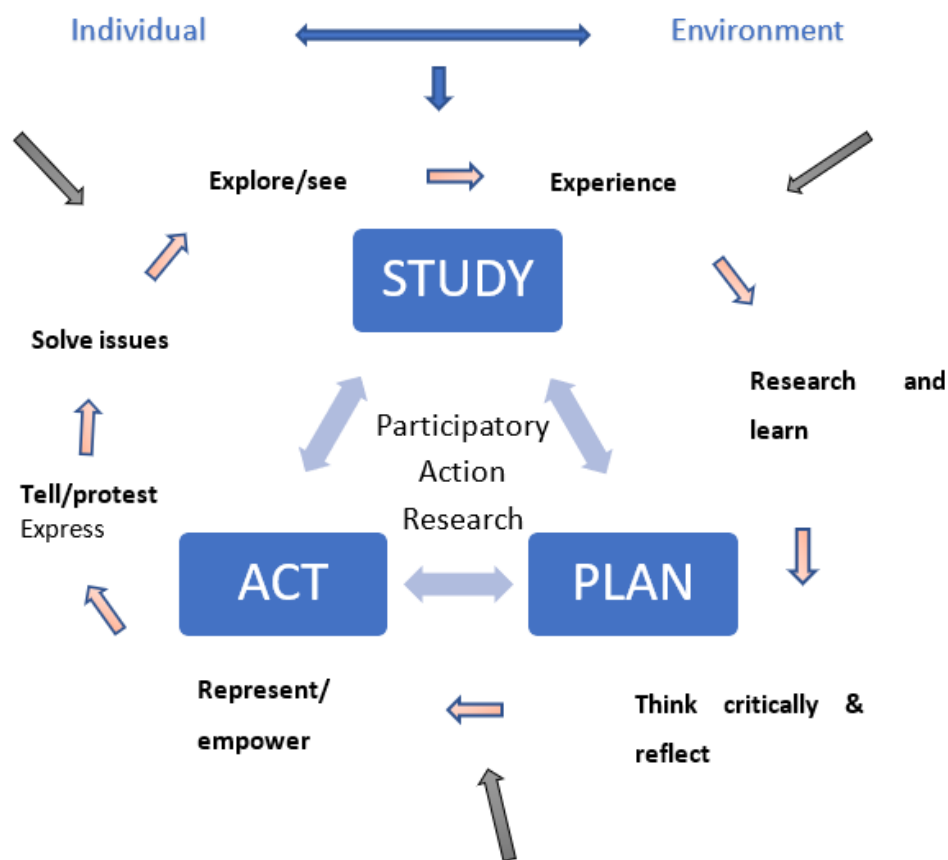
Figure 6.6. Methodology on working with children: A cyclic process that can be adapted and altered, with response to external drivers.

This model can be compared with the research design model in Chapter 2.3 (cf. Figure 2.2) and participatory planning process with children in Chapter 5.1 (cf. Figure 5.1). Colour blue denotes the main steps of this Participatory Action Research. And the colour orange shows the process in a more detailed form. Each of the steps are derived from the literature review, case studies, philosophical and theoretical backdrop. For example, to explore and see is mentioned in 'Growing up in an urbanising world' book; experience is connected to Vygotsky's and Piaget's child's development; learning from the environment is suggested by Dewey; to think critically and reflect upon it is based on Freire's critical theory approach; solving community issues, telling and protesting about it is given preference in the United Nation's Convention on the Rights of the Children; and finally representing individuals of the community is supported by Wang's approach of working with the vulnerable community (see Chapter 6.2). Hence, the outer cycle is justified. The black arrows are the external drivers, as suggested by Bronfenbrenner's ecological system theory, such as schools, local authorities etc. or sometimes some situations during the process, such as, time management, availability of different stakeholders, children's school timings and classes etc.

6.5.1 Working on the Model

From the previous chapters, the gradual development of the methodology can be witnessed. Hence, a review of all the models is provided below.
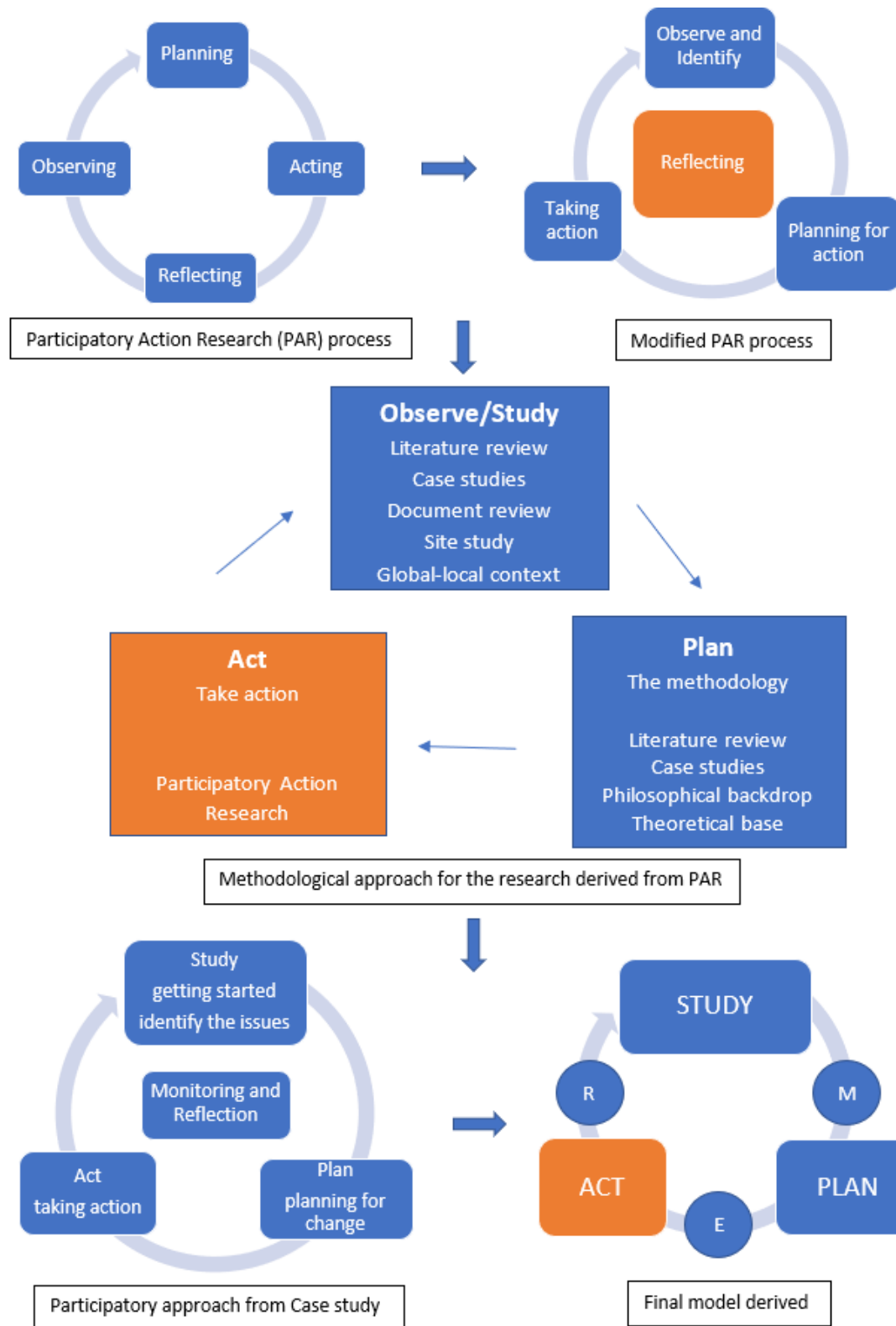
Figure 6.7. Gradual development of model for Methodology for working with the children.

M-E-R are the Monitoring Evaluation and Reflection of the whole process. Monitoring and reflection is derived from the PAR model and case study on participatory approaches. Evaluation is added into this model as after monitoring the process, a self-evaluation as a researcher is important. After this the reflection of the whole process can take place. This seems like a feasible approach to the analysis part of this action research.

After the model is developed, it is important to plan how it can be used. In this research, multiple cycles are performed to bring about a change with children's involvement in the process. A general cycle looks like the diagram shown below.

'n' represents the number of cycles performed in whole project; 'n' could be an infinite loop as the cycle is continuous.
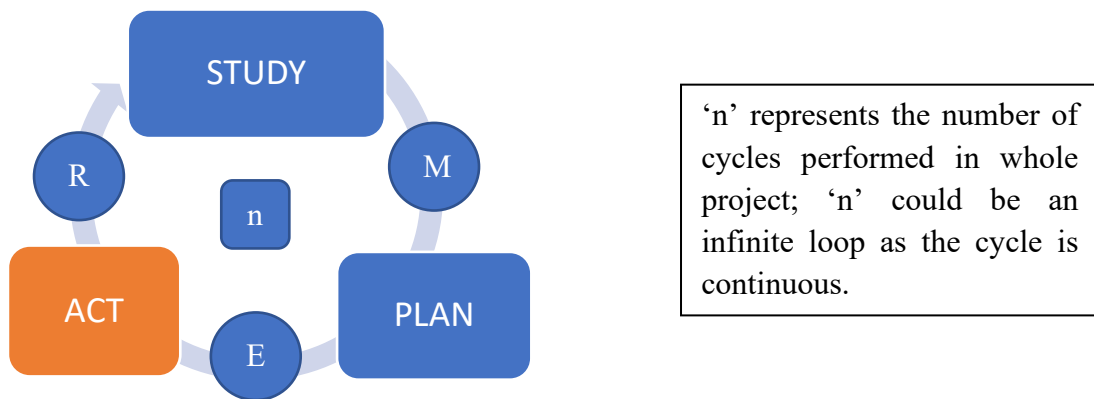
6.5.2 Detailed Methodology and Timeline on Working with the Model

I will explain the methodology and timeline of the research here. As it is action research, the methods applied are not very straightforward hence, difficult to represent in a flow. Nonetheless, I make an attempt below to elaborate my methodology. Altogether five actions are taken in this research.

Action 1 is the main methodology and Action 2 is the immediate outcome of the Action 1. Hence these two are described generously. A powerful tool photovoice is used as Participatory Action Research with children in Action 1. Photovoice will be introduced at the end of this chapter in Chapter 6.6 and will be explained in detail in Chapter 7 according to the context.

The result obtained from the children are presented as a process. Then the whole process is evaluated, and analysis is done by me. Study-Plan-Act is done during the Action cycles and Monitoring-Evaluation-Reflection is done throughout the process as well as afterwards. Follow up actions were taken as per the result of previous action and site conditions.

6.5.2.1 Action 1 – Photovoice (June 2018, November 2018 – January 2019)

Study

As I have mentioned earlier, the study part of this research had started long back. All the literature review, case studies and document reviews are part of the study phase of this research. According to this, methodological approach was also developed. Hence, planning phase was followed here after.

Plan (June 2018)

In the planning phase of Action 1, I explored neighbourhoods in different sectors of Kathmandu. The methods used were nonparticipant observation, photos, field notes and map study. Initial map study helped me to identify the four types of neighbourhoods for further study. With my observation, I selected two probable sites for further study. Initial situation of open spaces is identified by me in this part of the research. The details of the process are provided in the Chapter 7.

Act (November 2018 – January 2019)

After the planning phase was over, taking action phase started in two sites, which lasted for about three months. The taking action part of Action 1 started with Photovoice with children. This was done in two sites (two schools in each site). Children's perception regarding open spaces are explored in this part. As this research involves a mixed and flexible use of different methods, they are explained in detail as they appear in Chapter 7. The basic steps were, taking photos, telling stories, critical discussion and then exhibiting the photos in the local community.

Monitoring, Evaluation and Reflection (MER) (February 2019 – October 2019)

After this phase, MER was started, which meant evaluating the data sets. Children's result is analysed, categorised to develop themes. Children's understanding of their environment is analysed based on the previously acquired literature and case study summaries. Different methods were used as per the requirements, such as deductive thematic analysis, open coding, interpretative analysis and so on. The details of each are presented as per the appearance in the Chapter 7.

Overall process of taking action with children is studied. Though I have placed this part as the end of the action cycle, constant monitoring evaluation and reflection is taking place throughout the process, which is utilised for overall reflection of the whole process. Comparative of my

observation and children's observation and children's relation to their environment is explored. The results obtained from Action 1 are studied and then probable solutions are explored for further step. Looking at the feasible solution that could be done immediately was cleaning and awareness campaign. Therefore, further action was planned – cleaning campaign, which is illustrated below.

6.5.2.2 Action 2 – Cleaning Campaign (November 2019)

Study

The study phase of this cycle starts with studying the result of Action 1. The result obtained from Action 1 helped to formulate Action 2. The solutions provided by the children were categorised and hence a second action is planned to make more impact on the research site. As children said that there is a lot of garbage disposal everywhere, starting off with a cleaning campaign would raise awareness regarding this issue.

Plan

Further plan with children, meetings, interactions were carried out. As well as all other stakeholders were contacted in order to reach the next stage. Out of the solutions provided by children in Action 1, cleaning campaign was easily achievable and was agreed by all the stakeholders. From the result of two sites, it was decided that Action 2 will be done only in one site, so the site in which the process would be predictively smoother was chosen.

Act

Cleaning campaign was organised. The details of the process are also explained in Chapter 7. An informal discussion session was done by the children with the authorities. Children raised their voices and authorities listened to them. Though initially there was no respect from their side towards the children, after this session, a good bonding was established.

Monitoring, Evaluation and Reflection

During the whole process, I did ethnographic observation of the whole process, I made informal conversations with the locals as well as observed people who gathered around while the team was cleaning. The informal session after the cleaning campaign, gave rise to further participation and encouragement to participate in such activities. Children further emphasises that lack of awareness is the major cause for the dirty and polluted city. Though the authorities did not want to listen to the children, but the children went head strong to prove their point. In

this part, instead of texts and details of the discussion, the action taken are observed. This helped to understand the children and their environment in more depth. Interactions amongst the children, children with the authorities and local people, all was observed.

6.5.2.3 Action 3 – Exhibition in larger scale and making a park (March 2020)

As for further action, after studying the result of Action 1 and Action 2, it was realised together with the children that the major reason for issues in open spaces is 'lack of awareness'. For this, an exhibition would be needed to raise more awareness by showing the photos taken by the children as well as sharing their experience and stories. Another solution given by the children was making a park in their neighbourhood.

Hence, an exhibition together with both schools of both sites, inviting activists, artists, experts and so on was planned. In one neighbourhood, discussions were carried out with the local bodies and community group to construct a park with the children involved in the project.

Though the planning was done, action could not be taken due to Covid-19 pandemic. After I arrived in Kathmandu at the beginning of March 2020, there was a huge rise in cases and therefore, there was a strict lockdown. No gathering was allowed and no projects or exhibitions including huge crowd was allowed. Children especially, were not allowed out of their houses. Hence this action had to be halted.

I had come for three months to Kathmandu for this final phase of the research to conduct an exhibition then finalise all the result and validate them. But due to the unpredicted pandemic, my research also had to change the path. Hence, I started looking for alternatives. Though after Action 1 and Action 2, I could have stopped the research, I wanted to make a bigger impact as suggested by the children as well. Hence, I planned to take two more actions – virtual discussion session and expert interview.

6.5.2.4 Action 4 – Virtual discussion session (March 2020)

Study

Aforementioned situations explained in Chapter 6.5.2.3, were the study part of this action cycle. As meeting the children for discussion was not possible directly, an online session was hence planned.

Plan

I planned an online session with the children in both the sites. The children who were involved in the research as well as other children from the same schools joined for this session. The representatives of all the schools, who were involved since Action 1, facilitated the process.

Act

In the online session, I talked about all the actions conducted so far with the new group of children. The children (research participants) who were involved since the beginning of the research talked about their experience as well as shared their knowledge and urged everybody to take care of open spaces. An online survey was done of all the new children asking them to give ideas to create awareness regarding open spaces.

Monitoring, Evaluation and Reflection

I analysed the data entered by 72 new children. Themes were derived from their answers. And they were compared with the previous findings of research participants.

6.5.2.5   Action 5 – Interview of the experts (May 2020)

Study

Analysing the whole process from the start of this research, and in the course of planning Action 3, it was realised interviewing the experts could help with the validation of the data.

Plan

Since there was enough time to conduct more study to back up the finding and also during the previous actions, no experts were involved, I planned an unstructured interview with two experts – one urban activist and one urban planner.

Act

As face to face was not possible, online interview was conducted. The interview was recorded and transcribed.

Study

Excerpts from the interviews were read and themes were identified. This helped in backing up the findings so far.

6.6 Photovoice

Considering Participatory Action Research (PAR) approach, a powerful tool: Photovoice, is used to engage the children as researchers to bring about a social change. Photovoice uses photographs to bring the voices of marginalized population to the policy makers. It involves taking photographs and sharing stories by exhibiting them in the community. The developer of photovoice explains experts thought may not match the thought of people at the grassroots (Wang, 1999). Hence, this approach will help to understand the situation of open spaces through the lenses of children.

Often, methodologies with children involve asking them directly, drawing and taking photographs (see Chapter 5). The examples there show how photovoice is being used actively in community-based planning and research with the children. Photographs taken by young people can be a valuable tool for gathering information on their environmental perceptions and attitudes. Photographs could develop a visual database on their perception of their local area, and this could stimulate discussion on various aspects of the place. Photographs could also help to communicate with the people in the neighbourhood in larger scale (Driskell, 2002).

Photovoice is an innovative method based on health promotion principles and the theoretical literature on education for critical consciousness, feminist theory, and non-traditional approaches to documentary photography. It provides cameras to the people to photograph their perceived health and work realities (Wang, 1999). Photovoice is a process by which people can identify, represent and enhance their community through a specific photographic technique. It gives an opportunity to the community members to have a voice to improve their neighbourhood. It gives camera to the people to enable them to act as recorders and potential catalysts for change in the community. Freire approached the community to think critically, begin discussing about their daily lives and the political forces that influence them through visual images. Photovoice takes this a step further by giving the cameras in the hands of the community so that the images are made by themselves so are the stories (Wang & Burris, 1997).

Photovoice was first used by Wang and Burris in the 1990s, as an educational approach, with rural Chinese village women to function as a participatory process in a large-scale need's assessment. Photographs and stories were used to identify significant community issues, critically reflect on the contributing factors and identify possible solutions (Engebretson, 2006).

As a community action research method, it is rooted in Freire's (1970) critical pedagogy, feminist theory and community photography. This is connected with the PAR as both methods

involve the participants in identifying and mapping their needs, evaluating life circumstances and possibilities (Warne & Gillander Gådin, 2012).

6.6.1 Paulo Freire – Pedagogy of the Oppressed

In Freire's (cf. 1970) work with 'illiterate peasants' – as he terms, Freire recognised three levels of consciousness amongst them. Depending on these levels was how reality was interpreted and these interpretations provoked behavioural responses.

At the lowest level of consciousness, people were captive by conventions of inherent submissiveness and accepted their circumstances silently. At this level, their helpless attitude and passive behaviours adapt to the situations which actively contributed to their own oppression. Moving on to the next level of consciousness, individuals were able to perceive and interpret the social situation, basically comprehensive but corrupt. However, their reaction to such instance was not towards analysing and addressing more essential issues of injustice. Instead, they exhibit behaviours of lateral violence – blaming others for the social reality of their lives. Then, at the highest level of consciousness, individuals become aware that their own assumptions shape the interpretations of reality – thus emphasizing critical consciousness.

Freire's work was always to move individuals from lower level to higher level of critical consciousness. His educational approach has almost become synonymous with the philosophy of empowerment and participation in public health and community development (Bopp & Bopp, 2001; Minkler & Wallerstein, 2003). The influence of the culture on the individual and the influence of the individual on culture were the emphases of the discussions and the cocreated knowledge. The goal being to engage the people to participate in their own learning, a combination of action and reflection that he called praxis. Social oppression results in a culture with limited capacity for analysis and as such initiatives has evolved into a social change theory of critical consciousness (Wallerstein & Sanchez-Merki, 1994; Watts, Griffith, & Abdul-Adil, 1999). As a Freirian-based (cf. 1970) process, the photovoice project had three main goals:

- To engage people in active listening and dialogue
- To create a safe environment for introspection and critical reflection
- To move people toward action

Wang and Burris (1994) included another goal:

- To inform the broader, more powerful society to help facilitate community changes.

Hence, summarised again, the Photovoice has three main goals (Wang & Burris, 1997):

- To enable people to record and reflect their community's strengths and concerns;
- To promote critical dialogue and knowledge about personal and community issues through large and small group discussions of photographs; and
- To reach policy makers.

In Chapter 7 the steps of the photovoice methodology have been listed with the context specific approach. Photovoice is a flexible and adaptable tool for community-based intervention. When there is a need to create awareness around a certain issue in the community, especially issues that have not been realised or witnessed by the general public as well as issues difficult to address, photovoice works as an excellent tool (United for Prevention in Passaic County, 2021).

Over the last twenty years, many peer reviewed articles have been published on photovoice projects in various community settings with different cultural backgrounds as well as wide range of concerns. It has given platform for community members to discuss and act on critical issues presented with photographs and stories (United for Prevention in Passaic County, 2021). Many research papers especially related to health issues have used and critically reflected upon its use (e.g., Killion & Wang, 2000; Wang, Cash, & Powers, 2000; Wang & Redwood-Jones, 2001).

It has also been used in several studies with children and adolescents in order to shape actions to change behaviour and shape engagement and community change and as a research method to collect data about children's and youth's experiences. It is a creative method that helps children to assess their strengths or issues in the neighbourhood and to communicate it both visually and verbally to the concerned authorities – policy makers, city leaders or researcher as well as the local people (Derr, Chawla, Mintzer, Cushing, & Vliet, 2013; Gant, et al., 2009). Large scale exhibitions can help to reach out to larger community (Driskell, 2002; Derr et al., 2013). This method has specifically been used in the evaluation of public and open spaces in the neighbourhood. Photovoice helps the participants reflect upon their locality and build capacity within to gain power (Derr, 2016). It is such a participatory tool that can bring a positive sense of community to enhance individual and community well-being, also empowering the people with its action-oriented approach (Budig, et al., 2018).

6.6.2 From Photonovella to Photovoice

Photonovella does not entrust cameras to health specialists, policymakers or professional photographers, but puts them in the hands of children, rural women, grassroots workers and other constituents with very less access to those who make decisions over their lives. The term photo novella, foto novella, and photonovel have been commonly used to describe the process of using photographs or pictures to tell a story or to teach language and literacy. It is designed to include new voices in policy discussions by facilitating collective learning, expression and action. The two main uniqueness of photo novella for empowerment education are its contributions to changes in consciousness and to informing policy. This participator process integrates empowerment education, feminist theory and documentary photography. In photonovella, empowerment also includes communicating identified needs to policy makers (Wang & Burris, 1994). Photovoice takes a step further and puts voices in the pictures so that the meaning it is trying to transfer has a stronger effect (Derr, 2016). It may provide an effective and clear way for people to show their perceived strengths and needs, to promote critical dialogue and knowledge about their community's assets and concerns, and to reach policymakers through their images and stories of mundane life to bring about a social change. It is designed to increase the individual's and community's access to power. Essential gateways must be investigated to start the process, for example, ward office, community groups etc. (Strydom & Puren, 2014).

The exclusive forms of science together with policy and service structuring, conducted by outside experts are ever more failing individuals and their communities. Hence, as a response Participatory Action Research is becoming increasingly relevant (Israel, Schulz, Parker, & Becker, 1998; Green, 2001; Louis, 2007), which combines science with society for social transformation (Chevalier & Buckles, 2019). Photovoice specifically aids in this goal as well as gives tremendous opportunity to analyse the rich data collected throughout the process. The result of which is generously elaborated in Chapter 7.

6.6.3 Recent Use of Photovoice as a Methodology with Children

In Nairobi, Kenya, photovoice was used with the children in an orphanage (cf. Johnson 2011). Along with photographs, participant observation, interviews as well as workshops that favoured in giving voice to the children was the focus. Children took the photos and then interpreted them, narratives were created by the children to reflect, discuss and analyse. It gave children the opportunity to direct the research agenda as well as comfortably share their issues which

they would hesitate otherwise. The drawback during this project was the expense of taking photos as children were given cameras and for other handlings (Johnson, 2011).

In Boulder, Colorado, specifically, photovoice method was used in five different variations with different age groups and abilities (cf. Derr, 2016). One of them is accessing neighbourhoods and public spaces. The methods used with the pairing of photography and texts to express ideas has been effective in providing modes of expression as well as facilitate discussions (Derr, 2016). City agencies in Boulder, Colorado, the Boulder Valley School District, the Children, Youth and Environments Centre at the University of Colorado and a number of community organisations have been working in partnership to integrate young people's ideas and concern into the redesign of parks and civic area and the identification of issues for city planning (Derr et al., 2018).

Its mission is to empower Boulder's young people with opportunities for inclusion, influence, and deliberation on local issues which affect their lives, regardless of their age, ethnicity, or socio-economic background. It works with children to include their input in local government decisions, mostly with projects related to public space design, urban planning and more (Derr, 2016). This demonstrates about children's capability to strengthen their neighbourhood, their positive attitude in difficult circumstances and the methods used, for example photos to evaluate their own neighbourhood (Derr et al., 2013). A month-long exhibition was planned of the photographs taken by the children. Though they were hesitant to express themselves as first, but when the facilitator helped with prompts, they were able to develop a voice that was powerful and meaningful. There were 1500 visitors which ensured high visibility, also boulder's affluent residents visited, which helped to show the issues of the youths in Boulder. Engaging more people, organisation and conducting more collaboratively programs like these was highlighted important for such processes.

In a study in South Africa, photovoice was used to understand children's representation of nature (cf. Adams, Savahl, & Fattore, 2017). The age group of children was 12-14 years. Data was collected through photovoice and community mapping processes, both were supported by group discussion which allowed children's engagement. The participatory techniques used allowed participants' reflection on significant spaces and places, photo journey and mapping to explore neighbourhood experiences and perceptions of natural spaces. Conclusively, it was evident that children as key contributors in the planning process is crucial for child participatory framework. To analyse the data, theoretical thematic analysis was employed, as it is closely

related to the researcher's theoretical tendencies and usually coded to align with the study aim and concern of the research. Braun and Clarke's (2006) six phase thematic analysis were used – familiarising with the data through repeated readings, initial coding, identifying themes, reviewing and refining themes, final naming of themes, and finally producing the findings (Adams et al., 2017).

Nonetheless, while photovoice process allows the flexibility of use, the final outcome sometimes may not be conclusive or relevant. Hence triangulation of data is needed. The data analysis hugely depends upon the researcher. As mentioned in Chapter 2, the researcher's role in generating data and then analysing them is the key to the success of the applied methodology in social science research. And Photovoice is no exception to it. Clear roadmap and research objective is essential in such processes. Enough time must be given for familiarising with the data. Photovoice may sometimes create political threats and might be considered risky to be used with children, as the stories represented might be offensive to the visitors and stakeholders. There should be careful judgment of the researcher and facilitators on whether the contents are safe to be presented.

7   Applying Methodology

Research questions.

1. What is the situation of open spaces in Kathmandu city?

In Chapter 3 (Research Area), a part of the analysis has been done for overall city. Document review and prior research in site gave scenario of the city and map study identified different zones for further study. One neighbourhood was identified in each sector – with altogether four sites for further study. For this phase, I do nonparticipant observation. The data collection methods are observation, field notes, photographs and videos. The story of the observation shows the situation of open spaces through my analysis and the most suitable site is selected on this basis for Participatory Action Research.

2. How do children perceive their local environment with respect to open spaces?

Photovoice is the tool used for this part of the research. Photovoice being a comprehensive tool gave an in-depth perception of children regarding the situation of open spaces in their environment – identifying types of open spaces, activities and issues in them, reasons for the issues, and then finally proposing solutions for them. The analysis is done in two stages. Firstly, children's perception is represented as it is, by sorting out the data using excerpts, open coding with keywords, discussions, critical reflection and so on.

The second part takes the form of deeper analysis. I read and reread the data set to observe the pattern. Each step in the data from the main texts of the children, the group discussion, workshop and exhibition were observed on site as well as the collected data is re-observed and rearranged. Here, children's role, their participation and capabilities are explored. The effect of their surroundings and their interactions are discussed.

3. What could be an effective model to realise children's genuine participation to bring about a change in the situation of open spaces?

The model developed in the previous chapter (Chapter 6) is hence tested here with the action and reflection series. This helped to figure out if this model is effective or not. The key factors to be considered while working with children were considered based on previous chapters (Reviewing Concepts and Concise, Research Area, Case Study). The findings were compared with theoretical backgrounds from Chapter 6.

7.1 Testing the Methodology – Continuing with Participatory Action Research

In this chapter, I explain how the data was collected and step by step methods used and altered according to different scenarios justifying my process of Plan-Act-Study with Chapters 2, 4 and 6. At the same time, analysis is done to evaluate the use of Participatory Action Research (PAR) with the children. Hence, this chapter will show the analysis of the data, the results as well as discussion as the process of Monitoring, Evaluation and Reflection (MER) is taking place simultaneously with the research. The MER process also brings forth the critical overview of the overall process.

The methodology developed to work with the children is used with flexibility of approach. This research was carried out with multiple action and reflection process. The complexity and simplicity of data relied upon the changing situations as well as familiarity of the researcher in the research site. The action cycle that has been shown in the previous Chapter 6 (Developing a Methodology) will be explained phase wise and all of them will be proceeding of the previous action plan.

As suggested by Driskell (2002) and Chawla (2002a) it was important to identify the site situation by the researcher before formulating plans to conduct the research. The Chapter 3 (Research Area) answers part of the first research question - observing the situation of open spaces in Kathmandu with available secondary data – literature, document reviews and map study. Four sites were identified by this approach and then I conducted an onsite study to find the situation of open spaces in these areas on the ground. In many instances, I have gone into the ethnographical analysis as I was born and brought up in this environment. But I have always backed up my observation with other sets of data.

7.1.1 Action 1 - Photovoice
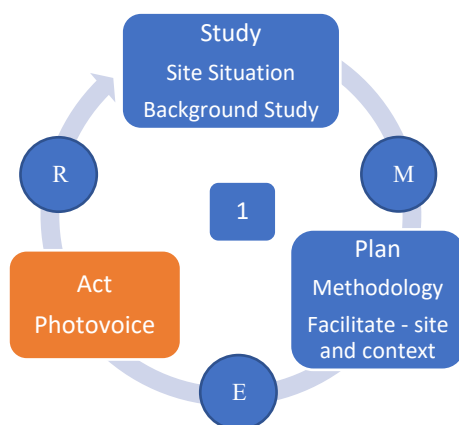
Figure 7.1. Action 1: Photovoice.

Action 1 is the most important step of this research. This is where the photovoice methodology takes place. Hence the Monitoring-Evaluation-Reflection process for this action is done more elaborately and this is the main body of this research.

7.1.1.1 Plan

'Study' in this research had started since the beginning of the process. Hence the previous

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chapters are the study part of the first action cycle. The planning had also started prior and continued with choosing the sites to work with the children, thus, elaborated below.

A.   Identify the Site

It is important to find a comprehensive site which represents the city. Hence, study was done in different zones of the city. The four zones for further study were identified in Chapter 3 (Research Area). The further site study helped to identify two neighbourhoods which could be representative of the broader and diverse community.

B.   Procedure for Site Observation

After the map study (see Research Area Chapter 3), the areas/zones were visited in search of suitable neighbourhood from each zone. Three days' rigorous site tour helped me to choose the neighbourhoods for observation. Once the data was collected from this initial observation, the analysis helped to determine the neighbourhood for detail site study and further analysis.

I conducted a slow-bike tour, stopping at many places, in different neighbourhoods in Kathmandu within the zones. I stopped at places and observed how children use/not use the open spaces and at different time frame of the day. While going through the different streets, I found many variations. Keeping the field notes, as an ethnographic observation, I backed up the data with the photographs taken during that time. Stories are made of different sites observing activities of children seen in open spaces (cf. Andersson & Lindkvist, 2000).

Criteria of site observation:

- Categories/types of open spaces identified during the observation.
- Onsite observation at different time period of the day for activities carried out.
- Children in open spaces.

Activities observed in these spaces were summarised in an elaborate table. Please refer to Annex D for the detailed tables derived from onsite observation and field notes. The time slots for site observations were 8:30-9:30; 11:30-12:30; 14:30-15:30 and 17:30-18:30. Below is the summary of the site observation in all four sites.

Figure 7.2. Glimpses of activities in Open Spaces: East, West and North sector. a: segregated footpath; b: children walking home from school on the street; c: neighbourhood square; d: cycling on the road; e: unmaintained open space; f: ready to play after school; g: exploring the natural green pockets; h: sports field.

Streets were wider, compared to three other sites. There were well maintained separate footpaths (Figure 7.2 a). Mostly the houses were gated (Figure 7.2 d & f). But the children had

different places to explore – from green hills for unstructured play (Figure 7.2 g) to formal sports ground (Figure 7.2 h) where teenagers were playing with gender inclusion as well as maintaining the time frames. Streets were also used as play spaces (Figure 7.2 d & h). There were mixed age group activities in the same spaces. There was a lot of scope for maintaining the existing open spaces (Figure 7.2 e) but nonetheless, elderlies and children were using these spaces. Few shops were on the ground floor, small maintained centres - cross sections where everybody enjoyed sitting for a small chitchat (Figure 7.2 c). It was safe for children to walk home as there was wide footpath in many places segregated with greenery from the street (Figure 7.2 a). There were no dangerous construction sites, streets were well constructed and safe for children. Spaces were busy during the mornings and mid afternoon and evening time; around noon, the streets and open spaces were mostly empty. School going children and religious activities mostly in the morning.

Figure 7.3. Glimpses of activities in Open Spaces: City Core Sector. a: Sister-brother duo exploring the area; b: children running around; c: feeding and playing with pigeons, sitting on temple plinths; d: junction for all age group; e: elders fetching water, children playing around; f: hang out before going to the school; g: main square with varied activities – people sitting, vendors selling goods; h: children cycling, people walking, varied activities.

As it is the city open space and the main square of Kathmandu, the activities taking place were varied. There were children playing freely (Figure 7.3 b, f & h), local people fetching water from the stone spouts (Figure 7.3 e), people seating around the elevated platforms (Figure 7.3

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d & g), children playing with pigeons and feeding them (Figure 7.3 c), teenagers hanging out and taking pictures and so on. It has many temples; hence the elderlies were also involved in religious activities. Only few vehicles like school vans and taxis were there. Slow traffic which made it safe for the children and everybody. Vehicles are parked in the square even with no parking signs. Construction materials and wastes were alongside the road and pathways. Children were playing with the tools left at the construction site. In the morning time, I also observed particularly one sister-brother duo (Figure 7.3 a). I followed them and their activities for an hour while also observing the surrounding. The two 4- 6-years-old children were freely walking around the whole area, stopping at their own pace, observing the environment and familiarising themselves with others. They were talking to the local venders, getting free stuff from them. When they reached the temple, old ladies were giving them prasad (sweets). During the day and evening, children's activities were minimal, it was dominated by adults either as visitors, vendors or shopkeepers targeting these adults (Figure 7.3 g). Children were not seen in the main squares, but in the inner courtyards, they were playing around when their mothers/parents were fetching water from the stone spouts (Figure 7.3 e). In the mornings and evenings, the spaces were very busy. No other forms of open spaces such as green spaces, parks, playgrounds etc. was observed. Few children, especially boys were sitting around chatting and cycling as well (Figure 7.3 d & h). In this site, as it is a historical heritage site, many other aspects must be considered while planning open spaces.

iii.   *Central Sector - Anamnagar*

Figure 7.4. Glimpses of activities in Central Sector. a: narrow streets; b: small and obstructed footpath; c: children going to school accompanied by elders; d: puddly road, difficulty for children; e: a child playing in the pile of bricks; f: children playing and exploring in the construction site; g: public court used by dominant group; h: children playing in private plot.

Chaotic puddly roads (Figure 7.4 d), obstructed footpaths (Figure 7.4 b), congested streets (Figure 7.4 a & c), a lot of construction sites (Figure 7.4 d, e & f) – this area is a typical example of the haphazardly growing neighbourhoods of Kathmandu. There were no squares or public

open areas, a small badminton court was used by a school during the day and dominated by the youths in the evening (Figure 7.4 g). Children were mostly playing in either private plots (Figure 7.4 h) which were accessible or construction sites with materials such as piled bricks, also on the puddles on the road (Figure 7.4 e and f). Children with independent mobility were very less, mostly teenagers and they were mostly walking in groups. Otherwise, younger children while going to school in the morning, were accompanied by parents. Even in inner streets, children were under supervision of their parents while playing. In this area, there was no proper playground or sports ground. Nonetheless, narrow main street and grocery shops on the ground floor, made the neighbourhood vibrant (Figure 7.4 a). This shows a clear picture of any other urbanising city of a developing country as mentioned in the Research Area (Chapter 3).

iv. Land Pooling Area - Kuleshwore

Figure 7.5. Glimpses of activities in Land Pooling Area. a: Open space used for religious activity and partly maintained; b: children returning home after school; c: morning walk encounters of the elderlies; d: central open spaces used by many and observed by many from outside; e: construction waste left on the road; f: children playing in the inner streets; g: pedestrian friendly inner street; h: Public Open Space converted into private parking.

A well-planned settlement with ample of open spaces in between the settlements as well as availability of pedestrian friendly pathways where vehicular access is not possible (Figure 7.5 g). Roads were proper and inner streets and open spaces provide children with play

opportunities as well as places to hang out for the elderlies (Figure 7.5 a, c, f & g). In the open spaces provided by the planning, few are well maintained, some are converted into temples (Figure 7.5 a), and some have become spaces to dump waste as well as park private vehicles (Figure 7.5 b). A lot of activities in the morning when children are going to the school, old people going for walk (Figure 7.5 a and c). After school-time also shows a lot of movement on the street, children passing by playfully with different activities (Figure 7.5 b & c). The main open ground at the centre also has activities (Figure 7.5 d). Still there is a lot of waste disposal on the road, a lot of construction waste and unsafe areas for children (Figure 7.5 e). Even though it was a planned area by the government, it has not been used to its potential.

II.   *Situation of Open Spaces*

After I identified the open spaces, I asked a question to myself.

Where is the park and playground?

Based on the observation above, the categories of open spaces and activities are summarised below in Table 7.1.

Table 7.1. Activities observed by Researcher in different Open Spaces.

Open Spaces	Activities
Main Street	Main street at all times and in every site was a multi-use space. Passing ball, throwing ball and playing with self, girls having snacks in the evening.
Secondary street	Only one neighbourhood had a unique secondary street, which seemed to be for walking/pedestrian space. Different play activities, e.g., badminton, chungi – a rubber band game, cycling, passing balls etc.
Footpath	One neighbourhood had a proper segregated footpath from the street. Others lacked proper footpaths. Even when there were footpaths, they were obstructed with many objects.
Green areas	Even the special areas allocated for open spaces, greenery, parks, were not utilised. When they were maintained, they were not accessible – many converted into parking, waste disposal site etc.
Empty plots	Children were also playing in the private plots as well as puddles in the street, used as playground by children of different age group, creating their own play.
Urban square	This space is prominently existent in the city core area. The activities in these spaces were varied, mixed age group, though comparatively less children,

	people were actually using public space. In one of the neighbourhoods, where such small junction was seen, it was occupied most of the times and different activities were taking place by different age group.
Temple square	All of the sites were religiously active. Even spaces allocated for greenery were converted into temple squares in some neighbourhood.
Parking lot	Separate parking was not seen in any neighbourhood, vehicles parked at the side of the streets, footpath, unused open spaces, spaces segregated for greenery etc.
Sport field	Sports fields were almost empty in any other time of the day, only active during evening. Training for sports, sport activities by young teenagers- boys and girls, groups of children from nearby schools.
Construction sites	Children were playing in construction site too. Playing in the puddle of water, walking on lose bricks, playing with the tools.

When I observed the activities, noted them, and analysed the data, I got my answer.

Children create their own play!

At the end of two weeks of observation, categories of open spaces were developed for further observation. It could be seen from the observation that time slot 11:30 to 12:30 is the most inactive period of the day. This could be because children were at school during this time period and also the observation was carried out were summer days with temperature around 27-29 degree Celsius. All the neighbourhoods observed were connected with religious sites. Ethnographic observation gave rise to thematic analysis approach. The aim was to observe all the activities in the open spaces at different period of the day and then analysing the data with emerging themes (inductive approach) and then interpretating them (Braun & Clarke, 2006). Hence the types of open spaces identified as well as the activities observed were emerging from the data itself. Children were creating their own play. Sport field was mostly used for scheduled sport activity. The activities in other open spaces during different period of the day were different making them multifunctional to some extent. Temple squares which were religious sites in the morning were where elderlies were sitting for some chitchat in the evening. The secondary streets and footpath were a medium for commute as well as place to gather around and hang out. Streets served multipurpose use as children were freely playing around in the streets.

III. *Final Site for Participatory Action Research with Children*
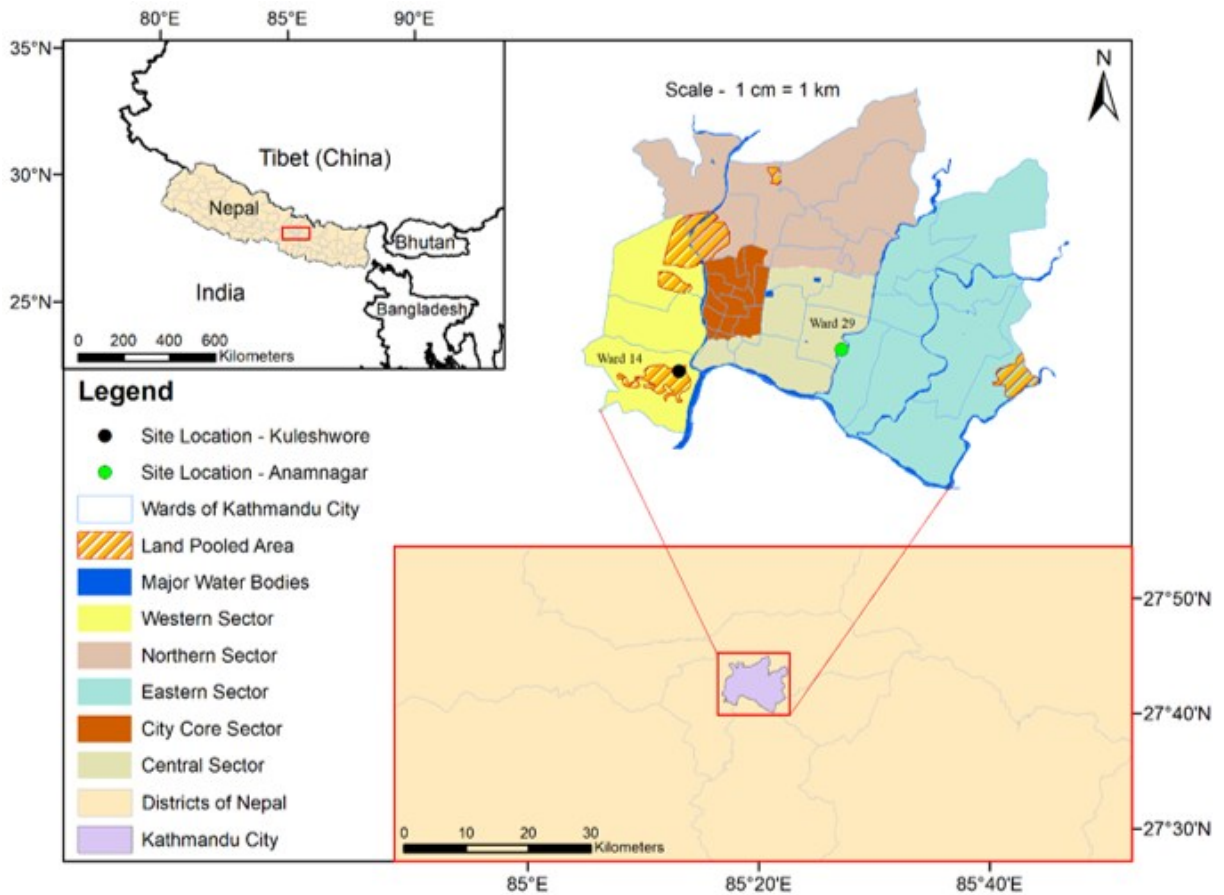
Figure 7.6. Location map: Research area: Kuleshwore (Site 1) and Anamnagar (Site 2), in Kathmandu, inset shows location of research area in Nepal.

From my observation on different neighbourhoods in Kathmandu, I finalised two sites for further study. I realised that working on one site will not give comprehensive result and working on all of them would not be possible because of time frame of my thesis. Hence to find a feasible solution, I finalised two sites. The two chosen sites were:

Site one - Kuleshwore – which lies in the south sector but represents very few sites of the city with proper planned settlement.

- Planned settlement with provision of open spaces from the land pooling area.
- An area planned by the government and then sold to the residents who are using the public open spaces as per their need and not per the planning.

Site two - Anamnagar – Out of the five zones in the map, this area lies in between the central and east/west/north zones. Hence it is representative of all zones as well as representing contemporary scenario of open spaces in the city.

- An overly crowded inner neighbourhood with small streets and minimum or very less areas for play and activities for children.
- Haphazard, crowded settlement with less or no open spaces.

7.1.1.2 Act – Photovoice Tool

After the initial site study, it is now time to understand the situation of open spaces at the grassroots through the lenses of the children. The children of two urban neighbourhood are the participants and coresearchers in this Participatory Action Research (PAR).

The three main goals of photovoice in the contextual ground.

- To enable children to record and reflect their community's strengths and concerns – *in the case of this research – the situation of open spaces in their neighbourhood*
- To promote critical dialogue and knowledge about personal and community issues through group discussions of photographs. – *in this case, issues in the open spaces,* and
- To reach policy makers through exhibition and presentations – *Raising voice and making change.*

As the broader problem was already identified by the researcher, the goal and objective were also defined, the photovoice process was started with the participants from taking the photographs. But through the photos and stories, the issues are discovered in more depth. Children's perception could bring a completely new scenario to the existing issues, as this is the main aim of photovoice. Photovoice being a flexible tool, making few steps as base, I designed it according to my contextual requirement at the beginning of the session as well as in between (Wang & Burris, 1997).

A. Conceptualizing the problem/Identifying the issue – *literature review, case studies and site study by the researcher*
B. Building platform – *making connection and moving forward*
C. **Meeting the participants – *explaining about the project and their role***
D. **Theme to take photographs – *Open spaces around your neighbourhood***
E. Arranging facilitators and training – *two facilitators – retired government officer – researcher's father; PhD researcher – fellow researcher*
F. Building rapport – *with policy makers/experts/community group members for audience and possible collaboration*
G. **SHOWED questions – *Taking photos, telling stories***

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H. Group discussion – *common themes, telling stories, representing issues, critical reflection*

I. Reaching the policy makers and local people – *parents, caretakers, community groups – exhibition, workshop and presentation*

In the above-mentioned steps, the **darker bold** fonts represent the work done by me with the children. Hence, step A, B, E and F was done by me and the other steps were done in collaboration. Though step A and B which was done by me was important part of the study, the contextual and identifying issues at the micro level was done by the children.

A. *Conceptualising the Problem/Identifying the Issue – literature review, case studies and site study by the researcher*

This was done since the start of this research as the topic explains it. This is, in part, the planning phase of the research too. This was done through literature review, case studies, research area study.

B. *Building Platform – making connection and moving forward*

I. *Age Group of the Participants*

I have considered the children of age group 11-16, from grade 7-10. The opinion of the children can be heard from a very early age but for them to voice their own opinion, the age group seemed relevant as is considered by Lynch (1977). This approach is completely new in the research site. Hence, methodological approach should be simple for it to be comprehensible for the participants (Chawla, 2002). Striding upon the research questions, the participants of the research are taken as the coresearchers, and they will be called Little Researchers (LRs) here after.

II. *Choosing Schools – Making First Connection*

I consulted the local schools first to get acquainted with the children in an environment where they also feel safe and familiar. It was easier to get in connection with children this way (Mauthner, 1997). This approach gave children the safety as well as the required freedom once they were separately with me though within the school premises. Ward committee was also contacted but at the next phase, when the children were ready to raise their voices. But in both the methods, the main aim was to build a sense of trust between the participants and the researcher.

As mentioned in the book Growing Up in an Urbanized World (GUIUW), measures must be taken to ensure meaningful and wider participation of children (cf. Chawla, 2002). It is mentioned in the Growing Up in Cities (GUIC) project, that an obsessive attention was dedicated to trying to establish organisational connection to make them work in favour of children (cf. Chawla, 2002). As, I was doing everything without being a part of any organisation, to gather an effective participation, I approached through schools.

Hence, to approach children of the same locality, the local schools in both the areas were selected. After finding out the schools, I went to talk to the authorities in the school to explain about my project and ask for permission to carry it forward. In both the neighbourhoods, there were three local schools which were mostly taking children coming from around the area, at walking distance or dropped by parents in bikes. Out of the three schools in each area, two in each site (shown below) were interested to collaborate and hence the process started.

Kuleshwore – Site 1
School 1 – New Horizon Boarding school
School 2 – AvanteGarde Boarding school

Anamnagar – Site 2
School 1 – Occidental Public school
School 2 – Nepal Mega school

In the first site, Kuleshwore (Site 1 from now onwards) - I met the authorities of the schools and explained about the research. They seemed very happy to collaborate. The schools were small in scale and there was no school bus, so majority of the children came to school either by walking or dropped off by the elders. The principals were very supportive, and they understood the project and were curious to start it. In one of the schools, the principal even provided the space for the exhibition as well as was helping in the poster stamping and other works. This support from the adults, more over authorities is in true means aid to PAR.

In both the schools, the principals or the coordinator gathered the interested children for the research. Children from grade 7-9 were available as the principals thought grade 10 students had upcoming exams and would hamper their studies.

In the second site, Anamnagar (Site 2 from now onwards) - The schools were bigger in scale, had school buses but I asked the school for the participation of children who live nearby and come to the school walking. In school 1, first meeting was with the principal and after that, I was introduced to a coordinator for further work. In school 2, first meeting was again with the principal. He took deep interest in the research and asked many questions to understand the

whole process, involvement and outcome. He too connected me with a coordinator. In the first school, there was only one meeting with the principal and further work was done with the coordinator. In the second school, there was frequent meetings with the principal as well as the coordinator. The principal even stayed in the group meetings with the children as well as put his thoughts forward while in the discussions.

C. *Meeting the Participants – explaining about the project and their role*

Figure 7.7. Initial Meetings with Little Researchers in Site 1 (right image) and in Site 2 (left image).

Many approaches are needed while working with children of different age group and the analysis process varies as well. As this approach is very new to the research site, children who could express themselves with words were chosen. The criteria for choosing the children were that the children should be familiar with the locality of the study site and were from a local private school. Nonetheless, who participated in the project was up to the school and the children. I did not interfere in the selection of the children and let the participation be as much voluntary as was possible from my side. They were explained the process of photovoice, what it could do to a community and how our voices could be heard regarding various issues related to the community. To make sure the participation was voluntary, in the first meeting set by the school, I told them if they were really interested in the project they can participate. Hence, in the second meeting, only interested children came. Hence, I did not choose the children, but they chose to work with me. There were altogether 20 children in each site who were the Little Researchers (LRs) for this research. They were asked to take photographs of their neighbourhood with the theme – Open Spaces. I explained them about open spaces, community and urban planning briefly and what this project aimed to do. There was a two-way interaction after I explained them about the project. After the first meeting, some of them even searched in the internet regarding open spaces and discussed this in the second meeting.

I.   *Explaining the Ethical Consideration*

The ethical consideration of taking the photographs was done. Asking for consent, not violating other's privacy, not taking disturbing images and so on. Also, ethical consideration while working with the children was followed by the researcher. All the process was carried out in the school premises taking permission from the school authorities. If the children from one school were taken to another school, it was made sure that they were safely dropped back to their own school (cf. Thomas & O'Kane, 1998). One more important aspect was that the children had complete freedom to participate in the project and they could withdraw anytime. Also, their participation was in their terms, it was up to them on how they wanted to proceed and each time I made some changes or decisions, I always asked if everybody agreed. This helped to not only develop their own voices but also to respect each other's choices.

D.   *Theme to take Photographs – open spaces around your neighbourhood*

This was based on the topic of the research and prior observation and analysis of the researcher. Hence the theme to take photos was already given, but it was not limited to the types of photos. What open spaces could mean and what type of issues or situations they want to show was totally up to the children.

E.   *Arranging Facilitators and Training – two facilitators – retired government officer – researcher's father; PhD researcher – fellow researcher.*

To conduct a Participatory Action Research means to continuously act and reflect and also observe the process as a researcher (mentioned in previous chapters). Hence, it becomes viable to facilitate the process with more observers and reflectors. I asked two people to facilitate the PAR – facilitators hereafter. I explained them the whole process as well as the research objective and also ethical consideration while working with the children. They agreed to abide. They also helped with the logistics such as taking photographs, recording group discussions and presentations as well as taking field notes.

F.   *Building Rapport – with policy makers/experts/community group members for audience and possible collaboration*

To realise the project and to bring actual change in the community, I started looking for connections that would accelerate this process from the beginning. In previous projects/studies, parents, caretakers, community members and government officials, mayors were taken as important actors for this process (cf. Chawla, 2002). Hence, I started to contact with local ward

office, community groups through schools and so on. This gradual build-up of relationship, visiting and revisiting the concerned parties helped me form a close connection with the relevant actors as much as possible. As shown in the Figure 7.8 below, the meetings took a series of linear flow and then back again in some instances, that means, meeting with the school took place, then meeting with children took place again, meeting with ward members took place and again meeting with school coordinators took place, back and forth.
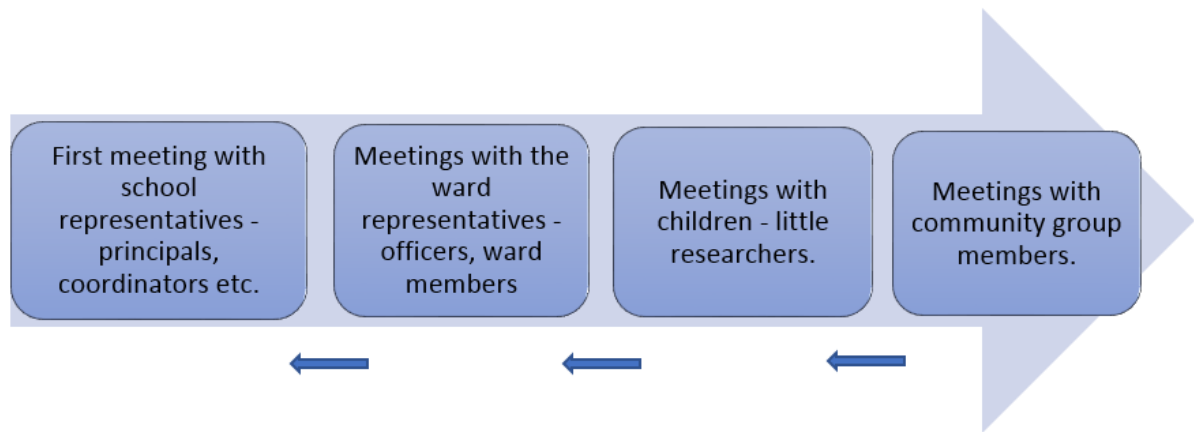
Figure 7.8. Process flow (back and forth) for making connections and building rapport.

G. *Taking Photos, Telling Stories – SHOWED questions*

Before the PAR process was started, it was important to build up a platform for the process to be taken successfully. Hence the former process was required. Now the main body of PAR starts with planning, consulting, discussing and critical thinking with the Little Researchers (LRs) with photos, group discussions, workshop and presentation.

In the follow up meeting, the interested children showed up. I asked if everybody had access to mobile phones, they said yes and they would use one of their parent's phones to take photos and share it digitally with me.

LRs were asked to take 20 photos each in their neighbourhood under the theme 'Open Spaces'. The photos should represent the present scenario of open spaces in their areas and how showing these photos could help the policy makers to take action for change. They were given two weeks' time to take the photos. Some took photos in groups, and some did not take the whole 20 photos. In the next meeting they brought the digital copies of all the photos, and I copied them. In the meeting after that, they were asked to select three most important photos and tell stories about them.

The stories of the photos should answer these questions (SHOWED):

- o What do you **S**ee here? – Situation
- o What is really **H**appening here? Action
- o How does this relate to **O**ur lives? Effect
- o **W**hy does this problem or this strength **E**xist? – Reason
- o What can we **D**o about this? – Solution

The LRs had selected three most important photos for them. From SHOWED questions describing the photographs taken by little researchers, a quick study/analysis was done by me. This analysis helped me to extract keywords and issues to be discussed in the group discussion. Example of this is shown below in the boxes. The **bold letters** represent the keywords from the texts written by the LRs and the numbers '2, 5, 9 and so on' represent the number of times they appeared in the texts, which is shown in the Table 7.2 below.

Table 7.2. Initial keyword (highlighted in bold) observation of SHOWED questions.

Site	Problems	Solutions
Site 1, Kuleshwore	**Unused land** – 2 overgrown bushes **Parking** in no parking – problem during emergency vehicles as well as for daily mobility **Garbage** 9 on street, unused land, river, footpath, even in parks, risk of accident, no place to walk **Pollution** – 5 land and air pollution water pollution, **environment** degradation Lack of **realisation**, voiceless **Uncivilised** 2, irresponsible, no effort, carelessness Lack of **greenery** Unmaintained private plot 2, construction site **Unsafe** and **unhealthy** environment for playing 2 **Park** with lack of maintenance, misuse No place for relaxing in the sun **Playing** in the street 3 – risk of **accident** Unconstructed road, poor **infrastructure** **Homeless** settlement	**Voice, protest** **Awareness and maintenance 5** **Motivate** and convince – utilise for benefit of the society **Inform**, forcefully remove vehicles cleanliness **Provision** – dustbin 2, park for sitting **Recycle**, management of waste 2 **Plantation**, **garden**, add greenery 2 Sanitation 2 **Park** for children, old people, utilise open spaces, playground, sunbath – **Activities** **Playground** **Play for good health, greenery for fresh air** Strict rules and regulations, government 2

Site 2, Anamnagar	**Pollution** 4, health problems	**Awareness** program 5 cleanliness
	Unconstructed road/**infrastructure** 2	**Provision** – dustbin, manage waste, Rest houses – chautara 3
	Lack of **greenery**, dry plants	Recycle
	Unused land 2	**Plantation**, garden
	Water pollution, misuse of water resources for bathing, washing clothes	**Sanitation** 2
	Garbage disposal 2 – temple area, unused land, road	**Park** for children, utilise open spaces, playground - **Activities**
	Misconduct of national heritage, problem for devotees	**Strict rules** and regulations, government 2
	Children cannot **play**, old people cannot **relax** 2	**Management** – time management of the playground for different groups of users
	Misuse of public space by using it for private provision	
	Restriction to play in public space, hierarchy and **dominance**	

The initial coding was done by checking the texts written by the Little Researchers (LRs). In qualitative research, coding is "how you define what the data you are analysing are about" (Gibbs, 2007). The occurrence of the same issues, the solution given by each one of them was considered while noting them down. The former list was considered as problems and the latter as the solutions as suggested by the LRs. This type of data analysis is considered as Interpretative Phenomenological Approach (IPA) where the participants' data is observed and interpreted by the researcher as per prior knowledge. Hence from the critical theory approach to IPA, the data set creates a platform for solutions from LRs as well as a theoretical backdrop from the researcher. As the data contains vast range of information, to choose and interpret the ones needed for this research was backed up by researcher's prior knowledge as well as align with the concern of photovoice, it was focussed more on issues in open spaces (Tuffour, 2017). Below are some excerpts along with photographs, from the texts written by the children answering SHOWED questions.

Garden – *with beautiful greenery – "When I came by that place my mind starts singing the beautiful song or poem. When I look at it my sad mood also become fresh."*

Nursery – *"a place I would love to visit, probably everybody. Properly utilised open space with greenery and beautiful scenes. All of our headaches, tensions and irritations fly away when we relax in such places."*

Central green field – *"All people play there but we cannot play there."*

Temple area – **"***a place for devotees. The space is small. What if the space was big? We don't see adults' group there."*

Utilised as park - *"The only positive aspect of open space of our locality is the park. It completely refreshes the visitors."*
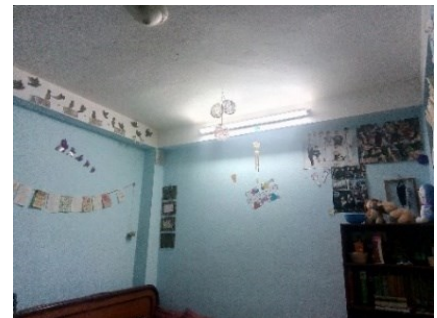
A room – *"spend most of the time, no open spaces nearby."*

"People are throwing garbage in the street, open areas, footpath, river side, river, temple area"

Figure 7.9. Example photographs taken by children with stories (both sites). The caption of each picture is mentioned by the students in their stories.

H. Group Discussion – common themes, telling stories, representing issues, critical reflection

After the initial data analysis and coding by the researcher, a group discussion was conducted with all the participants. The selected photos were categorised, and key words were identified. The discussion was carried out by showing each selected photo to the group and common themes were identified. The discussion was done around the following basic questions (Chawla, 2002), as well as keywords from the SHOWED questions derived by a quick analysis and the photos as shown in Table 7.2.

- What are open spaces?
- Who takes care of these spaces?
- How do you use your local environment?
- How do you feel about the places and community life around you?
- Which place do you particularly value? Particularly avoid?
- What changes do you observe in your community?
- What changes do you anticipate in the future?
- What are your own ideas for improving your environment?

Figure 7.10. Interactive group discussion session with Little Researchers (both sites). a: Site 1, School 1 and School 2; b: Site 1, School 2; c and d: Site 2, School 1 and 2.

The group discussion was video recorded and manually transcribed. From this transcription, the coding done (SHOWED) on the basis of thematic analysis was validated to devise theme/s (Nykiforuk, Vallianatos, & Nieuwendyk, 2011). Group discussion opened up more personal experiences and sharing of ideas and also meeting the common ground. Also, the photographs were used as props to involve everybody in the discussion. Hence, the keywords from the SHOWED questions, the photographs as props developed a base for the group discussion to discover even more intense issues that revolved around open spaces in the neighbourhood. For example, there were few photos of beautiful garden taken by LRs, appreciating its beauty, but during the group discussion, they expressed it that, even though there is a beautiful garden, they cannot enjoy it as it is always locked. This one-on-one discussion with the researcher's approach of facilitating it by making everyone participate and give their opinions added another dimension to the data analysis (MacDonald, 2012).

In this part of the analysis, the reoccurring themes were identified, the problems, the solutions given by the LRs, how they see the open spaces in their area was discussed. What is lacking, what could be made better, what they think is really good or bad, all these aspects were identified through the interpretation of the data acquired from the combined table (see Table 7.2). Children had a huge role during the group discussion to make sense of the data and interpret them in their own terms, in groups, individually as well as with me (Tuffour, 2017). The choice of data collection method affects the intensity of the analysis. In this research, as various methods have been used for the data collection, the depth of analysis varies. For example, for the photos, the SHOWED questions were answered in text by the LRs which gave a content but not a chance to deepen the issue. Nonetheless, for the same issues, the content was deepened by the group discussion.

I.   *Reaching the Policy Makers and Local People – parents, caretakers, community groups – exhibition, workshop and presentation*

The voices of the children were represented with the help of the photographs selected during the group discussion. One day workshop and design charette was organised in both the sites. At the end of the group discussion, it was decided together with the LRs which area they want to design or improve and the date for the exhibition. In site 1, it was decided that if parents are also to be invited then Saturday is a good day. The principals from one school from each site agreed to provide the ground of the school for the program. Invitation was sent to parents as well as children of the schools and they were asked to invite the neighbourhood residents too.

Figure 7.11. Workshop - Design Charette and preparation for sharing photos stories. Site 1. a: Little Researchers preparing for the exhibition and presentation; b: Little Researchers explaining their photos to the public; c: Local police officers visiting the exhibition; d: Community groups discussing with the school principal.

Figure 7.12. Workshop - Design Charette and preparation for sharing photos stories. Site 2. a & b: Little Researcher's preparing the presentation; c: Writing down the story for exhibition; d: Photo exhibition.

Each time, the researcher tried to do everything by herself and the team of children, the activities were somewhat influenced by either school schedule or the authorities' will (principal/teacher). Hence for this final exhibition, I requested to meet the interested children after school hours and plan the project without interference from others who are in power. I printed the photos selected by the LRs to exhibit for the event. Children themselves added stories to their photos and then put them on display. This process was aided by the principals and other children. Figure 7.13 shows few example pictures of photovoice exhibition while the rest are presented in Annex L.

Figure 7.13. Sharing the stories – few photos with stories as example - Photovoice exhibition (both sites). a: A temple in the Open Space; b: A crowded city; c: People sunbathing and chatting along the street side; d: A social media page shown as virtual Open Space; e: Elderlies and children sharing a bench as common public space; f: A half erased zebra crossing as vulnerable Open Space.

In this workshop, LRs were free to choose which part of their neighbourhood they would like to redesign, or plan and the participants performed a design charrette for the planning of the selected open space. They worked on the map of the research site provided by the researcher. Most of them said that they want to make an ugly space better. Some worked on the riverside, some designed a park in a neglected space, some provided general solutions of the problems in the city. This flexibility of approach helped the children to discover their potential on their own.

After the workshop, they also presented their design to the public which was also video recorded. Question answer session and feedback was carried out. This presentation and voices of the LRs magnified the findings. The photos were displayed on a public platform with the stories/themes. The invitees for the exhibition were the local people – children's parents, community group members, municipality/ward members, local police officers, experts and so on.

Figure 7.14. Presenting the design with maps, drawings as proposal for Open Spaces, Site 1. a: Exhibition drawings prepared by Little Researchers; b: Presenting their ideas; c: Different techniques used in exhibition by the children; d: Group photo after successful completion of the workshop and exhibition.

I invited the local authorities/representatives and community groups; children and the schools took the responsibility of inviting the parents and caretakers. Children were free to organise the

event. They went forward and were suggesting and designing the layouts and the whole program by themselves. They together with school staff got involved in the organisation of the exhibition and workshop. The principals in the two schools from each site assisted with the resources available at the school and whatever extra logistics was needed, I provided.

Figure 7.15. Presenting the design with maps, drawings as proposal for Open Spaces. Site 2. a: Little Researchers ready to give the presentation; b: Question-Answer session after the presentation; c: Different ideas for Open space management shared with drawings and paper notes.

7.1.1.3 Monitoring, Evaluating and Reflecting (MER)

As mentioned earlier, the MER process was taking place at all times of the project. Hence it was not possible to separate it under a different topic. But the analysis part done by me from all the data collected is represented below.

A. *Analysing the data set obtained from Photovoice*

After the photovoice process was completed, there was a rich source of data gathered through all the process, texts from LRs, the transcript of the group discussion as well as workshop/presentation/exhibition. Hence, it was my turn to do analysis to evaluate the whole process and reflect upon it. First of all, I analyse the data set from the LRs and then I evaluate the whole process. For the detailed analysis of the SHOWED questions for three photographs

taken by the little researchers, they were categories as shown below. The questions were represented with the below mentioned categories which helped to organise the data at the initial stage. This took the form of deductive thematic analysis at the beginning phase (Glaser & Strauss, 1967). But while going through the data set, the emerging codes in each category were merging some categories and creating new themes. The text written by the little researchers were read and re-read to familiarise myself with the data (Braun & Clarke, 2006). Then the coding was done in terms of an initial textual approach for all the texts (Braun & Clarke, 2006; Butschi & Hedderich, 2021).

What do you See here?	What is really Happening here?	How does this relate to Our lives?	Why does this problem or this strength Exist?	What can we Do about this?
Situation	Action	Effect	Reason	Solution

Types and categories of Open spaces Issue/activities in Open Spaces	Who are actors? – Responsible	Types of intervention Children's participation
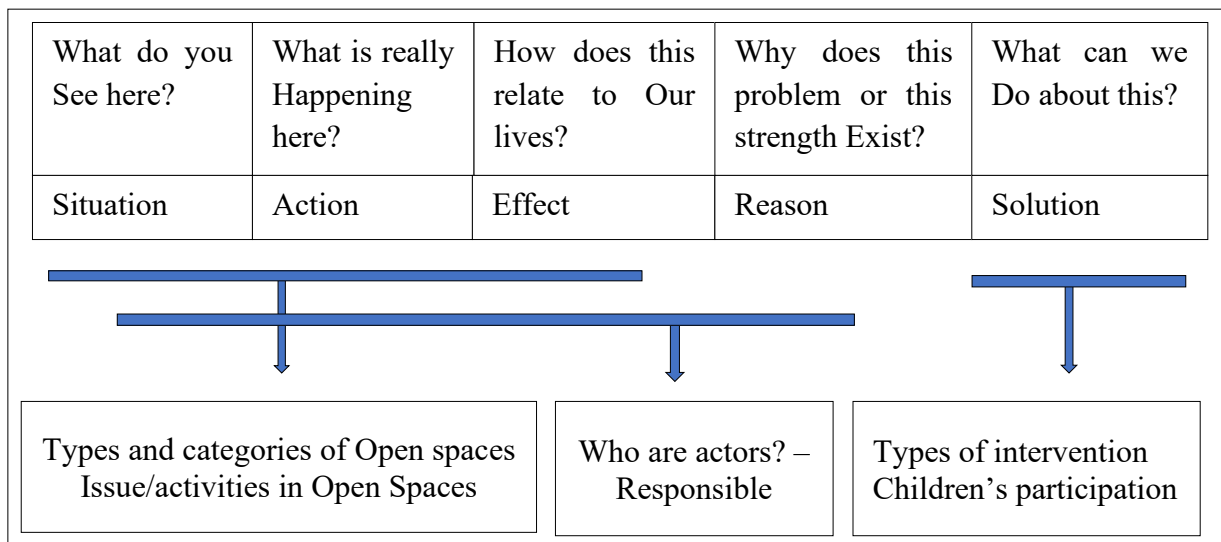
Figure 7.16. SHOWED Analysis Approach.

The figure shows the categorisation of the answers given by the little researchers (SHOWED questionnaires). The categories are already created from the SHOWED questions as mentioned above. The texts are sorted, compressed and keywords were derived in each category. The keywords provided coding which led to different categories. Themes are derived accordingly, and then new subcategories is formed (Butschi & Hedderich, 2021). The analysis then took inductive approach.

As shown in Figure 7.16, at the later phase, the data was interpreted with inductive thematic analysis approach. The three categories Situation, Action and Effect were looked upon together, where the themes 'Types of open spaces' and the 'Issues in the open spaces' emerged out (Glaser & Strauss, 1967). Analysing the themes 'Issues in the open spaces' and the 'Reason' together, the new theme emerges "Who are the actors?" – meaning who are responsible for the issues in the open spaces. The "Solutions" were another category that turned into theme itself, but it was called 'Types of intervention' for further categorisation. Looking at the solutions

provided by the LRs, a new theme emerged out which showed the level or type of participation children could provide for the issues. Hence the new theme "Types of children's participation" emerged. This is shown in detail in Chapter 7.1.2.

The data set were first observed separately for each category and then looked upon together to find the codes. Each little researcher's text was first individually sorted, then they were observed for each school and then altogether analysis was done. Here is the example of data analysis, initial categories, merging of categories, coding, devising new themes.

B.   *Example – combined of one Little Researcher*

Little Researchers	Situation	Action	Effect	Reason	Solution
Text of one Little Researcher	Some people staying on the road keeping them warm by the heat of the sun.	People are talking to each other.	They need to stay in the sun.	Sunlight doesn't reach the house of the people.	We can make parks for people to stay and talk, keep them warm.
	Kids riding bicycle on road.	Kids are enjoying themselves riding cycle.	They need to play games, ride cycles etc.	Kids need to remain fit. Riding bicycles makes us refreshed, fit and healthy.	We can construct the alleys to help the people ride bicycle and remain healthy.

Types and categories of open spaces Issue/activities in open spaces	Who are actors? – Responsible	Types of intervention Children's participation

Original Text	Code	Theme
Some people staying on the road keeping them warm by the heat of the sun. Kids riding bicycle on road. Sunlight doesn't reach the house of the people. Kids need to remain fit. Riding bicycles makes us refreshed, fit and healthy.	People on the road. Warmth of the sun. Kids riding bikes on road. No sunlight at home.	Type of Open space - road Activities/Issues – riding bikes, sunbathing

Figure 7.17. Example of data analysis for theme generation.

As shown in Figure 7.17, this was done for the text of all the LRs. When the situation, action and effect part are merged, the data appeared as shown below in Table 7.3 (shown only of one category of open spaces as an example).

This was done to identify the issues that come under the types of open spaces as observed by the little researchers, issues in other open spaces are presented in the Annex F.

Table 7.3. Issues in one category of open space shown of all the schools, (numbers) represent the number of times they appeared in the little researcher's text.

Open Space	Activities/Issues identified by Little Researchers
Road (6)	Children playing football on the road, compelled, risky. Children are playing, dangerous – vehicles come and accidents. Used for parking, blocking the traffic movement. In case of emergency, ambulance and other vehicles cannot enter the locality and it makes the place narrower. Throwing garbage. Polluted and stinking, environmental degradation – air and land pollution.
Daily Commute	There is lack of greenery, polluted and dirty, local people throw all waste there. No space for passersby to walk. Unhealthy. children playing, forced to play in busy street, very dangerous.
Road (6)	People are staying to keep them warm by the heat of sun, talking to each other. Kids riding bicycle, enjoying as they need to play games etc. Hole in the road – poor infrastructure, risk of accidents – political illness. People playing football on the road- risk of accidents, but people are ignoring it. People need refreshment and physical health. People are sitting obstructing other passers-by, Garbage.
Road (2)	Unconstructed. unconstructed, many road accidents.
That Place – Way to School	Garbage thrown, bad smell comes, it makes our health full of diseases.
Footpath	Construction work going on in unmanaged way, all the things left, difficulty in walking, children and people can get injured.

C. *Some Unique Types of Open Spaces*

There were some issues that did not fit into any category and hence, for the unique types of open spaces as well as issues, an inductive approach was taken as they were emerging from the data. They are as mentioned in Table 7.4 below.

Table 7.4. Unique types of Open Spaces mentioned by the Little Researchers.

Open Space	Activities/Issues identified by Little Researchers
Construction site	Used as a playground before, now as a parking lot, in the future, a party hall will be made. We are stopped to play, less chance to play outdoors, stuck indoors- no mental refreshment.
Hotel	People are enjoying here, come here for physical refreshment, tea, food and enjoying. This backs up the problem statement from Chapter 1 that, open spaces are not decreasing but changing forms and becoming more privatised thus creating more social divisions.
School ground	Children are playing, only place children can play without permission. But very less children are there. Most of them are limited to video games.
Narrow alleys and tall buildings	Dangerous in different situations, taken all open spaces.
Nursery	A place I would love to visit, probably everybody. Properly utilised open space with greenery and beautiful scenes. Everyone - children, adults, old people love to spend their time. All of our headaches, tensions and irritations fly away when we relax in such places.
Room	Spend most of the time, no open spaces nearby.
Rooftop Garden	Flowers are planted, substitute for green areas in open spaces.
Status Box of Facebook page	Where we spend our most time, no place to hang out, no parks.
Convo Box	Where we spend hours messaging, can't meet and make conversations.
Unmanaged Stairs	Not constructed properly and sustainable, very dangerous for children and elders many walk through this stair when they go to school. If we fall from the height of the stairs, it may cause death too.
Half Existing Zebra Crossing	Can't see it properly. People will cross the road carelessly and there is more possibility of accidents which may cause death also.
Central Green Field	All people play there but we cannot play there. We have to take permission from the community to play there. If we can play there, our health, mind becomes healthy, we can do entertainment.

Looking at the table above, we can see that Little Researchers (LRs) considered construction sites, school grounds, private plots also as open spaces. One LR considered her room, social media page and online chat box (a convo box) as open space. Dangerous spaces such as unmanaged stairs as well as half erased zebra crossing are also mentioned. Rooftop garden,

nurseries as well as tall buildings also show similar gist regarding lack of open spaces. Based upon these, categories and types of open spaces were identified (see Table 7.5).

D. *Further Interpretation*

That place is mentioned 5 times in Site 1 - Kuleshwore. This was interesting because they seemed attached to a place yet there was no identity or structure to the place. They also mention garden many times, some are well maintained but many are converted into dumping site. As this neighbourhood was a planned one by the government, there are many open spaces here, but they are not maintained, and little researchers point this out very effectively.

Street/road are mentioned many times in both the sites as unsafe and dangerous. With reference to this, Little Researchers (LRs) also often gave the reason for not being able to go out of the house alone to be the risk of accidents as well as other hazardous condition in the streets. Most of the LRs also said that the streets are unsafe, but they have no other options to play. Though considered as dangerous space, satirically it was the most used space too. The activities happening in the streets were children playing football, riding bicycles, chatting, people sunbathing etc. With this respect, indirectly it shows that streets are being used as multipurpose spaces. These ideas have already been practiced internationally, by providing car free play streets. Though they did not directly propose a car-free zone, it showed their concern for the issue and how it was unsafe for younger children. Considering the hierarchical role of cars over pedestrians in the city, it was obvious for children to say that the streets are not safe for them and that they should not play in the street as streets are for vehicles.

In case of Kathmandu, according to the LRs, it was seen that the social division and discrimination is even more prominent in the public spaces as some groups were more privileged to use the spaces while some were restricted entry to the parks. When asked the LRs always said the Temple areas are important for the elderly, and relaxed seating spaces too. In one of the photographs taken by a little researcher, showed that the elderly and children were seating together in a public space, in a bench. Cafes are also taken as spaces to hang out with friends as there is lack of open spaces and parks.

The most annoying thing for them was lack of cleanliness wherever they go or walk, garbage on the street, garbage on the footpath, in the open space, private plots, riverside and even rivers – garbage everywhere.

7.1.1.4 Result from Action 1

Based upon analysis and interpretation of data in Chapter 7.1.1.3, the result obtained are as follows.

A. *Types and Categories of Open Spaces*
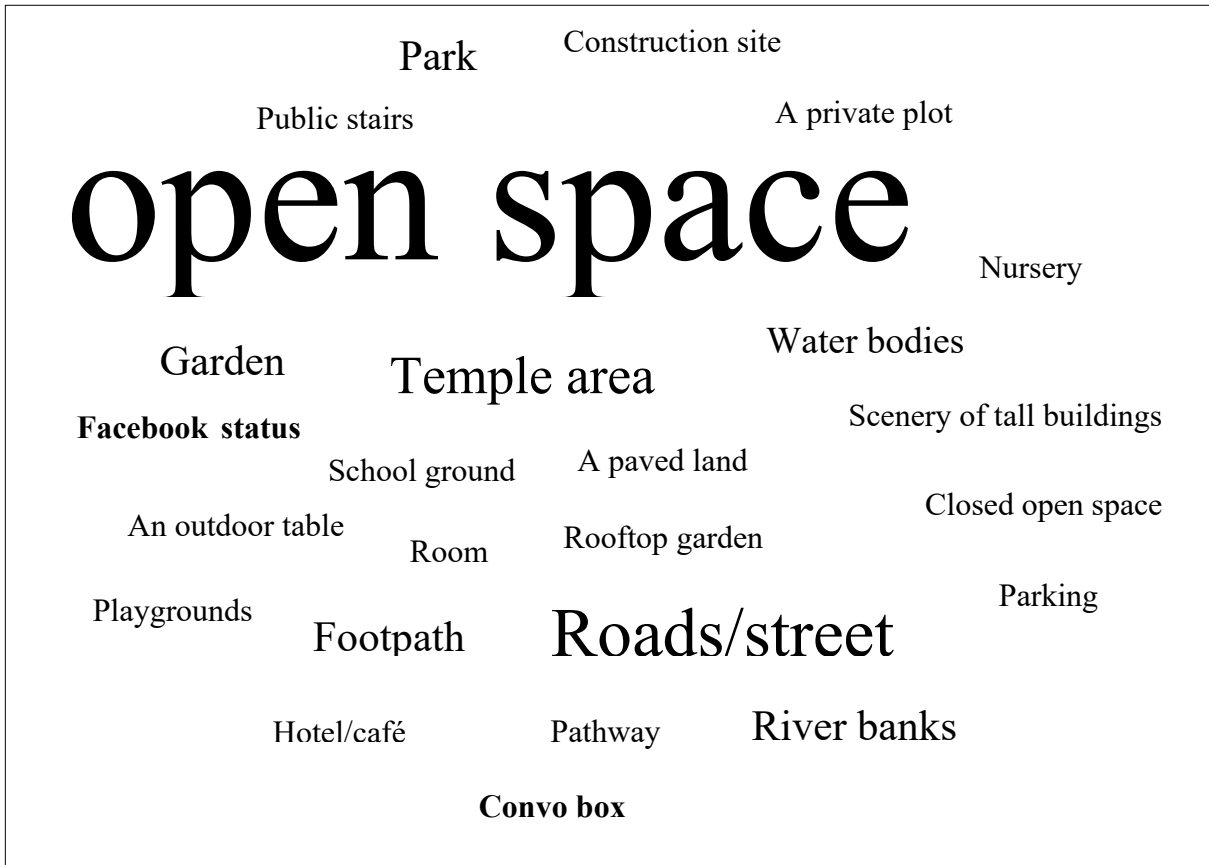
Figure 7.18. Open Spaces hierarchy by Little Researchers.

The open spaces mentioned by the Little Researchers have been showed with the word cloud concept. The Figure 7.18 shows the hierarchy of the repetition of the terms used for open spaces in the texts written by the LRs.

For example, 'construction site', 'rooftop' is used only once, while the increasing size of the texts, for example 'roads/streets', 'temple area' are frequently used, and the most used representation of open spaces being 'open space' itself. I have further categorised these open spaces as shown below.

Table 7.5. Types and Categories of Open Spaces by Little Researchers.

Categories	Types
Utility open spaces	Road/street, Footpath, pathway to school, public stairs, Parking, zebra crossing
Unused open spaces	Unutilised, locked, not maintained, private plots, paved land
Green spaces	Park/playground, rooftop garden, garden, trees, nursery
Satirical/virtual open spaces	Private room, hotel/café, fb status box, convo box, scenery of tall buildings
Restricted/constrained open spaces	Construction site, private plots
Religious open spaces	Temple area
River side open spaces	Rivers, riverbanks
Probable open spaces	School ground, private plots

B. Issue/Activities in Open Spaces

Negative

- A lot of waste, garbage in all types of open spaces.
- A lot of open spaces left unutilised.
- Pollution due to waste disposal and burning of waste.
- Air, soil, water pollution due to deforestation.
- There is a chance of prevalence of diseases due to these practices.
- Issues like bad smell, destruction of beauty, degrading quality of the environment.
- Children are not getting opportunity to play because of lack of open spaces, not maintained open spaces.
- People using open spaces are mostly old people and children. Adults are missing.
- Streets though considered unsafe is the place where most of the social activities are taking place, for example, sunbathing, children playing, people chatting, children riding bikes etc.
- Even parks are being misused and sometimes well-maintained parks are also not used.
- Private plots left empty are also one of the nuisances of the area. Nobody can use it, yet a lot of waste has been dumped here.

- Homeless settlements in the riverbank as well as solid waste disposal in the river is causing the river water to get polluted.

- Narrows alleys and tall building are seen as unsafe structures.

- Poor infrastructure and management issues – parking in the no parking zones, unfinished construction work.

- Private unfair use of public property - discrimination.

Positive

- There are a few places with a lot of greenery, and it is related with positive gestures.

- Nurseries and rooftop garden are taken as positive open spaces – used mostly because lack of open spaces.

- Garden is also mentioned, and its beauty is appreciated.

- Temple is taken as an important open space – national heritage.

- Park is considered as a recreational centre with beauty and greenery which refreshes the visitor as well as leaves an overall good impact.

Categorising the Issues

Different types of issues in the open spaces were categorised. I used Roger Hart's diagram for 'Desired Environmental Education' from the book Children's participation, which I have already shown in Chapter 6.2.2 (see Figure 6.2). These are compared with the overall issues identified by the children upon analysis.

This thematic analysis approach helped to understand the perception of the children regarding the open spaces in their community and the city as a whole. The texts from the issues were compressed, coded and then it was observed if they come under these pre-theorised themes or not. The detailed table is in the Annex G.

Altogether five themes emerged out at the beginning. Theme were related to:

Environment – mostly throwing garbage everywhere in the open spaces, air pollution, water pollution. Place to get fresh air etc.

Health and Safety – the pollution is causing harm to the health with prevalence of diseases as well as unsafe places to play or gather are threatening their safety.

Social/Cultural – children are playing, places to gather, sunbathing in the street, refreshment, old people sitting and chatting, these are mentioned. They also mention temple area as important part of the open spaces.

Political – many issues such as unconstructed road, road accidents, improper management of waste are also mentioned, they blame the holes in the road to be the negligence of the governing bodies.

Overall Beauty – this is mentioned with greenery, nurseries, beautiful garden etc. They also mention that the dirty places aid in the destruction of beauty.

Some of them could cross the themes such as playing could be seen as a social activity as well as exercise for better health. Hence referring to the themes of functionalism of open spaces (CABE Space, 2009) and Hart's (1992) educational model, the categories were as follows:

Table 7.6. Theme of the issues presented by Little Researchers. Comparison with Open space Functionalism (CABE Space, 2009) and Hart's (1992) Education Model themes.

Themes from Open space functionalism	Themes from Hart's educational model	Themes emerged from Little Researchers
Environment and ecology	Natural environment	Environment
Social	Local history and culture Social problems	Social/cultural
Structure and aesthetics	Aesthetic appreciation of the environment	Overall beauty
Economics	Political knowledge	Political/economic
New theme		**Health and safety**

Little Researchers' answers also showed in depth concern for the health of the residents as well as physical safety, which has been categorised as '*health and safety*' (Braun & Clarke, 2006).

C.   *Who are the Actors?*

Category 'Reason' shows how the issues are created and mostly who created it as actors. The theme 'Reason' does not stand it isolation, but it looks into theme 'Issues' too so that a holistic result is obtained. This helped in identifying who are the actors, who are causing the problem as well as who could be the possible solution makers. There were no preconceived theory or theme, hence the data was emerging. The texts were categorised as per what is the reason for the issues in the open spaces. The emerging theme was the same for all the schools, hence I am

showing one as an example. For the same analysis of other schools please refer to Annex H. Hence, when the two themes – 'Issues' and 'Reason' were analysed together, the texts generated theme 'who are the actors?' as follows:

Table 7.7. Table showing who are responsible for issues in Open Spaces according to Little Researchers.

	Whose responsibility – who are the actors?		
	Local people	Government	Both
Texts as issues and reasons	People are throwing rubbish and waste after using the park. A place full of garbage and cattle grazing and no dustbin. *A rooftop garden with flowers.* A lot of garbage in the footpath, bank of the river thrown by the people. – misuse of open space – carelessness of people Polluted footpath – food wrappers.	People are staying on the road for sunbathing and chat – lack of space for them to interact. Kids are cycling on the road – lack of space for them for their activities. A hole in the road. We have to drive in this road and accident may happen. All about politics. Tall buildings and narrow alleys – lack of open space and dangerous. No parks, no place to hang out with friends, no nearby playgrounds. Improper waste management, lack of dustbin, lack of basic education. Lack of management in the city area. No streetlights at night-time.	There is homeless settlement in the bank of the river. River is polluted with drainage water, bad smell *A beautiful place to relax, breathe fresh air, play, sit and enjoy.* People are throwing waste in the river. A place full of garbage and cattle grazing and no dustbin.

Hence from the table above one can see that there are several reasons for the situation of open spaces. While analysing them in detail, it was observed that not all issues were created by the people or the government alone. Under the theme, 'who are the actors?' it was observed that some issues were due to the local people, some due to the government and some existed because of both. This analysis later helped in doing the second action part of the research as the roles of the different actors were identified through this.

D.   *Types of Interventions*

Likewise, the solutions provided by the Little Researchers (LRs) from all four schools is combined and shown below in Table 7.8. The 'Solution' category shows LRs' views on how the issues could be addressed. Each colour coded themes have been listed below and the proceeding table shows the themes derived from them and are placed on the hierarchy of

number of times children mentioned them. The numbers in the table represent the number of times certain issues were repeated.

Table 7.8. Solutions provided by the LRs for the issues in the Open Spaces (both sites).

School 1, Site 2	School 2, Site 2	School 1, Site 1	School 2, Site 1
Clean and maintain, preserve, utilise, plantation	Proper settlement of squatter settlement by the government	Maintain pollution free environment **2**	Educated people should aware others about health problems of unmanaged and uncivilised lifestyle, as well as importance of games and sports for health **3**
Provide basic amenities	Think about and make parks for people to stay and talk and sunbath, children and senior citizens (government and local people) 6	Well construction of the roads **2**	We can create **awareness** programmes, follow rules and regulations strictly **6**
Private plots should be requested to be available for the local people when not in use by the owner.		Awareness programme and telling the importance *of* construction of roads and pollution free environment, manage dust **6**	create cleanliness program there. **4**
Set rules and regulations - not parking in the no parking area, not throwing garbage in the open area	Construct bicycle alleys and remain healthy	We can get together to maintain sanitation **3** make a children's park	Convince the people and manage, clean and care by ourselves all together with the help of our friends, family and other elder people. **3**
Awareness programs for cleanliness, greenery	Encourage people to come to park, play *2*	We can formulate a strict rules and regulations **2**	Make the garden more beautiful by planting flowers, make amenities like chautara, playground, afforestation programs cleaning **5**
Tell the authorities to clean	Make responsible, counsel people about proper use of open space *2*	Provide amenities, use the amenities	
Authorities can take responsibility of its conservation and maintenance	Amenities – dustbins in open area, footpath **2**	Manage waste, recycle, use dustbins	Management issues - **Complaint about this to the municipality, write letter to government to remind their duty,** within the community (fair use of public space by time management, proper infrastructure development, management of waste
Work together, consultations and mutual understanding among the stakeholders	Use open area to play and make more open area 6	**Aware/inform government for proper disposal of solid and liquid waste**	
Make the school ground available for everybody during holidays	Proper infrastructure development with planning – no narrow alleys, bike lanes **2**		
Motivate adults also take care of issues – they can take responsibility and have decision making power	Planting, greenery in open area, river banks **3**		
Peer gathering places like cafe	No throwing waste in open area		
	Special area for dumping garbage, Management of waste – recycling **3**		
	Awareness (programs) to know about open spaces and use **3**		
	Protest and make surrounding clean and use for good reasons 3		

Looking at the solutions given by the LRs and with reference to Chapter 5 (Case Study), the small- and large-scale intervention can be listed as below:

Table 7.9. Themes of Intervention provided by the LRs (in hierarchy of repetition).

Colour coded themes	Solutions/Interventions given by Little Researchers	Number of times they appeared
Colour	Awareness, motivation, counselling programs to educate, encourage, convince and make responsible citizens	22
Colour	Make parks and playgrounds for everybody	15
Colour	Waste management (sanitation, recycle, proper disposal of waste)	9
Colour	Infrastructure development (road, footpath, bike lanes, management of squatter settlements)	9
Colour	Protest/raise voice to the authorities	8
Colour	Keep the environment clean and green	7
Colour	Basic amenities	6
Colour	Greenery/plantation	6
Colour	Set strict rules and regulations	6
Colour	Collaboration and internal management – time, duties within the community	2
Colour	Make unused private plots and school grounds into public spaces	2

E.   Further discussion

The group discussion data was also observed. And it backed up the findings of the SHOWED analysis as well as deepened the themes that had emerged. It helped to carry forward the photovoice process to the next stage. Some techniques had to be used as a researcher to make the group discussion more effective, for example, the sessions were as long as an hour.

And to keep the LRs motivated and involved, I tried to create points of interest but not going out of the topic. The discussion had already been carried out for about 48 minutes; the children were losing a bit of interest. Hence, to bring them back to the discussion, I made some joke, and everybody were laughing and then continued through the discussion. Again, after about one hour and 20 minutes, the children were again losing a bit of interest. Therefore, I again improvised and used another technique. I called out somebody's name. This grabbed attention of all the children because they might have thought that they may be the next person to be called and they have to be attentive for that. This LR had written simple thing, but I highlighted it to get back to the topic.

As there were two sites, there was one group discussion in each site. The two schools from each site were mixed together to make it more interactive. One more important learning from the group discussion was that I myself had an opportunity to learn from the first one and then apply it on the second discussion. In the site 1, I directly started with the topics, and I realised that

LRs, though were fully participating were a bit reluctant at the start. To make the discussion more interesting, in the site 2, I first asked each one of them to introduce themselves and talk about the most important thing they would want to do in life. As the two schools were meeting for the first time, it gave them a chance to interact and break the ice. And I felt it was useful because I saw the LRs very excited and happy while doing so.

During the group discussion children were more relaxed and showed their innate nature. They were supporting and praising each other for bringing out important issues, they got involved in critical dialogues and healthy conversations, they all agreed upon the similar issues, sometimes they got confused of who took the photos and were arguing over it. They were honest on their opinions, for example, when I asked if they throw waste on the street, at first, they were a bit reluctant, but then one of them said 'everybody throws' and one other said, 'I only throw where there is already some waste'. A girl who wrote that her room and social media chat box as her open space, said when asked, 'I like to be alone, and for that, I need to be in nature and open spaces, to relieve my stress'. This shows that open spaces are not only needed for socialising and playing but children also need these spaces to discover themselves alone. When I asked how to make a park or open space so that it is liked by everybody, after a long gap, one of the LRs said 'by asking them!'.

Hence this is the start of democratic planning. Another LR said that she thinks that until the adults of the society are taking their responsibilities, children alone cannot make the places better. She said that as children they can raise voice and contribute to certain action, but the major part has to be done by the authorities who are in the position to do so. This also shows that children are aware of their strength as well as their limitations. In the SHOWED questions, many said that there is lack of awareness regarding the importance of open spaces and their management. I brought this topic out in the group discussion too, and everybody said there is lack of awareness. There was a long discussion regarding this, and it was discussed how 'awareness' could be brought into the people. Some said by showing the negative aspect of it, some said by giving penalty on misuse of open spaces, and finally it was decided that the best approach is to show it as advertisement – when people see it, then they realise it. Hence, showing through photographs was a good approach to reach out to the local people. Few examples of group discussion with Little Researchers are elaborated below. The text in the quotes is exact voice of the LRs, while the normal text is my interpretation/explanation of the LRs voices.

Example 1

"A private plot which was used as a park or playground by children before. Now the owner restricted them to play. It has become like an open dumping site. People just come over there and throw their waste from their homes."

Bringing this issue provides a very in-depth understanding of the neighbourhood. Any outsider or any other adult might not have looked into the past use of that place. But as the children were closely related and have history with it, they still remember and brought it in the existing open spaces context.

Example 2

"We can see children sitting there, or we can see old people sitting there. Missing are the adults have forgotten about their duty. Adults do not have any interest in the public spaces, how can we conserve them? We can raise our voices but to do the work is the responsibility/duty of the adults."

They know their roles and responsibilities and see the core of the problem as the concerned group not fulfilling their duties.

Example 3

"Our neighbourhood is cleaner than other places in the city."

For the question, what is the identity of your area, this answer was given by a little researcher in the planned neighbourhood. For other places as identity, they mainly talked about religious open spaces as well as the central green space.

Example 4

"The way is to show that there are more negative effects of doing such things."

When discussing how to tackle the problem of garbage disposal, this was one of the solutions mentioned. Hence, instead of showing how an environment could be made better and its effect to the community, one LR suggested to show what worst situations will be seen in the future when we do not take care of our environment.

Example 5

Most of the photographs were of garbage in different open spaces. When I asked them if they throw garbage in the street, though, reluctant at the start, they confessed that '*they do it*, *and they used to do it*, and also '*they do it when there is already a pile of waste on that place'*.

Hence this also shows their honesty and a room for improvement. Most of the times, they say that it is their duty to keep their environment clean.

Example 6

"Before it used to be a dumping site, there used to be open dumping there. After that, the municipality of Koteshwore, the ward office, the people of the office invested on this and constructed a park. Everybody is using this space."

A well-maintained community park was also photographed and praised by LRs. In the SHOWED answer part, they said that this park is a very positive thing in the neighbourhood, and it is named after a very famous politician. When I asked them for more details, they said that it used to be a dumping site and the local ward office took initiative to maintain it and now it is used by everybody. As far as the management, they take certain amount of fine – 'money if someone litters in the park'. So, they stress again that open spaces and park has to be managed by local bodies and the community should also participate in it to make it a success.

At the end of the group discussion, after all the photos and issues were discussed, the researcher and little researchers all agreed that for the workshop, they will work on a site, which is not good and propose a better design for the same. The common theme here –

"Design an area in the neighbourhood that is felt neglected."

I analysed the data from the exhibition and workshop again with hermeneutic circle approach. This approach is present in the construction, methodological and theoretical design of the research as well as the interpretation and discussion of the results (cf. Fuster, 2019). The text from the LRs provided a platform for deep analysis back and forth. After the workshop, exhibition and presentation at the local community, looking at the previous data was important. The main source of data were the SHOWED questions answers, the group discussion as well as the presentation and exhibitions supported the data analysis of the SHOWED questions.

It was interesting to see in the presentation, the LRs also took out general issues regarding open spaces. While the SHOWED questions and group discussion was more contextual with their

local area, the photo exhibition with the story telling as well as presentation, showed the overall scenario of the city. This was interesting also because it shows that they are able to look at the bigger picture and their concern for their environment and overall wellbeing.

As we compare the issues and solutions provided by the LRs in each school in each site, they were quite similar, except for few site-specific concerns. This also shows that each site has its own unique problems that can be observed by the people living there – hence the need for PAR at the grassroot. During the group discussions, children were more open and sharing stories, in both the sites. Their critical reflections, discussions and argumentations demonstrated their potential as coresearchers.

When it came to workshop day, the design charette session as well as presentation, the process and the observation was a bit different. I did not set any rules or format for the presentation and exhibition. The participants could present their work in any form, any language (Nepalese or English) and any way they want. Therefore, between the presentation in the two sites, there was a huge difference in the organisation. The LRs from schools in Site 2 were more outgoing, self-representative and confident on their speech. They prepared a formal presentation on a short period of time. They were confident to speak to the public. They started off by formally introducing themselves, then briefly introducing the project to the audience, then they talked about what open spaces are, the issues in the open spaces and then they went into what issues they found in their neighbourhood, and then they started providing solutions. Again, while concluding they urged and motivated everyone to take care of their environment. Whereas LRs from Site 1 were not prepared, reluctant to start and not confident in their tone of presenting. After some questions were raised, they started interacting more. This might be because of different schools and their way of training the students for the representation in the public platform. Nonetheless, it gave opportunities for all the children to do so.

One more thing that was different in two sites was that the exhibition in Site 1 took more realistic approach by depending on the children to invite the guests. For Site 2, the students' participation from both schools were made compulsory by school authorities. Hence, in Site 1, the interaction and feedback sessions were more impactful in smaller groups, but in Site 2, though it reached the wider audience, it was not as impactful as far as reaching to the policy makers.

Children themselves formed groups and started working on their activity. They really wanted to create something good that would be presented to the community. When I went to each group

informally, I found them working in good collaboration, sharing their objects and even ideas. They were asking who else will join the exhibition except for the ones they had invited. The workshop and the exhibition were a platform for them to showcase their findings of a month of site observation through photovoice methodology.

The purpose of the exhibition to reach policy makers was achieved – as there were discussion of some serious issues like – unmaintained staircases, restriction on using public space and so on. Also, they strongly highlighted that everybody has to work to make the environment clean. Here are few of the voices of the children during the presentation:

Site 1

No discrimination in the open space, everybody must be allowed to be in a beautiful garden.

It is us, because of us, we locals, so we must work on it.

Use technology to mitigate the effect of air pollution coming out of the factories if you cannot remove the factories.

The central open space should be for everybody. Children cannot play there; it should be provided for everybody. We request.

To maintain the unmanaged stairs is the expectation from this project.

There are many spaces here, but it is very unmanaged.

Do not throw waste in the temple area and make benches for elderlies to sit and chat.

Site 2

In Kathmandu, overpopulation is main cause of misuse of open spaces.

Utilisation of open spaces is important, not only building houses and turn them into dumping sites.

Lack of open spaces is not the problem; the proper management of open spaces is.

Only thinking about the outside world is not enough, we have to really be outside, be alone and take out our stress, have open space where we can play. It should be filled with greenery.

Not be using technology too much, like video games and social media, be outside and explore, it is needed for our health.

We need to be healthy, physical and mentally, for this we need outdoor activities and open spaces are important for this.

We all use, stay together, work hard and develop different ideas, and develop different ideas then we can improve the quality of environment of the Kathmandu valley.

We should make the open spaces available everywhere. We should keep control on urbanisation and industrialization and we all should work to make our environment green.

Children learn from the things that they see in their daily lives, and they are seeing that many people are throwing garbage. and they are spoiling that open space. So, they also, when they grow up, they

also tend to spoil these open spaces.

Old people because with their growing age, they love to be in peace and so park and playground could be the best place for them to maintain peace.

Everyone´s responsibility is no one´s responsibility. We are blaming others for dust and all the garbage that we throw on street but not cleaning it by ourselves. So first step we need to do is cleaning it by ourselves.

Their proposals on open spaces.

- Plant flowers, trees and benches and clean to make a garden for yoga and our good health.
- Many trees around the neighbourhood for clean air.
- Reconstruct destroyed temples.
- Not throwing waste in river and temple area.
- Proper utilization must be done by the local people.
- Renovate the buildings cracked by earthquake – better aesthetics.
- Do not put houses and factories together.
- Use greenery or other technologies to minimize the effect of pollution created by factories.
- Place dustbins and clean them every day.
- Open spaces for park, gym, telesthetic park, sanitation project on river side, constructing futsal, playgrounds, badminton courts and many more.
- Proper management, utilization and protection of open spaces.
- Keeping a lot of dustbins everywhere around the river so that people will be able to utilize it and not pollute the environment.
- Open spaces where we can play, relax filled with greenery.

Hence, in the exhibition again they were emphasizing on the same issues as mentioned in the SHOWED questions. With more site-specific complaints as well as general awareness regarding open spaces, the LRs really showed that they can provide input for small as well as large scale interventions, as was the conclusion also from the case studies.

F.   Researcher vs Little Researchers

Here, I reflect upon my findings in the research site with respect to open spaces and the perception of children regarding the process.

I only noticed the activities that was taking place in different open spaces but for the LRs the main concern was always a lot of waste in the open spaces, wherever they go – in the park, street, footpath, unused lands etc. and they felt that it made their environment polluted, hence giving them unhealthy life. I might have missed the garbage in the city as it has always been like this and maybe I had accepted it as default, but children raised this issue, almost all the LRs talked about it and brought it as a major topic for discussion. And their solution to it was creating awareness. This made a complete sense when they brought out this issue, that we have to make people notice it.

Table 7.10. Comparative table of Researcher vs Little Researchers - Open Spaces Observation.

Open spaces	My observation	Little Researcher's observation
Main Street	Main street at all times and in every site was a multi-use space. Passing ball, throwing ball and playing with self, girls having snacks in the evening.	Playing football, staying to keep warm, riding bicycles, enjoying playing games etc. Lack of greenery, a lot of garbage, hole in the road, obstructions, chance of accidents etc.
Secondary street	Only one neighbourhood had a unique secondary street, which seemed to be for walking/pedestrian space.	No secondary street was mentioned.
Footpath	Even when there were footpaths, they were obstructed with many objects.	Obstruction due to construction waste. Also mention throwing of garbage.
Green areas	Even the special areas allocated for open spaces, greenery parks, were not utilised. When they were maintained, they were not accessible – many converted into parking, waste disposal site etc.	Unused, locked, and also discrimination in use and used for private activities. Only old people and children are using it, adults are not there. Some green areas and gardens are beautiful and well maintained.
Empty plots	Children were also playing in the private plots, used as playground by children of different age group, creating their own play.	Empty plots are taken as nuisance as no one can access it and it is dumped with a lot of waste.
Temple square	All of the sites were religiously active. Even spaces allocated for greenery were converted into temple squares in one neighbourhood.	Temple is an important place- a heritage but still a lot of waste is thrown here.
Parking lot	Separate parking was not seen in any neighbourhood, vehicles parked at the side of the streets, footpath, unused open spaces, spaces segregated for greenery etc.	Parking in the street and no parking areas.

Sport field	Mostly empty during the day, only active during evening. Training for sports, sport activities by young teenagers- boys and girls.	Discrimination in the playing field as not everybody was allowed to use it.
Construction sites	Playing in the puddle of water, walking on lose bricks, playing with the tools.	Risky place for children.

Hence, the comparative of my observation and LRs' observation shows some similarities and also many variations. Such as:

- LRs looked at the open spaces in more detail. With their observation, specific open spaces were identified. I, on the one hand, was able to find the types of open spaces through my observation, through LRs' observation, on the other hand, categories of open spaces emerged out.

- Two more unique observation by the LRs were the probable open spaces – which were school ground and private plots which they suggested could be used by the children of the locality when not in use.

- Another was satirical or virtual open spaces – which was the room of one of the LRs' and also social media chat box – she argued that these are also open spaces nowadays because this is where they spend their time mostly.

- Along with this, plant nurseries, hotel/café, rooftop garden, zebra crossing are also considered as open spaces by the LRs.

- Apart from these, LRs consider riverbanks and river also as open spaces, issues here being disposal of waste and polluted environment.

- When I saw the central open space (sports field), I saw many children playing there and I thought it was a good open space but when LRs took photo of this space, their story was completely different. Though it was a public space they said that they were not allowed to use it and it was set aside for some special groups. Hence, there was discrimination in the accessibility of open spaces.

- The case of the public stairs was also very interesting. As they observed that it is an unsafe travel everyday especially for the younger children as well as old people. I did not notice it as an open space.

- I concluded by saying children create play everywhere. Children on the other hand who were playing in the street said that it is not safe for them to play there but they have no options.

Interestingly, LRs brought out the topic of central open space as well as stairs in the group discussion as well as strongly presented in the exhibition day as well. The concerned authorities had said they would look into the matter. After some time, the stairs had been repaired. Maybe it was in their plan already, but maybe the intervention could have accelerated the process to some extent.

Figure 7.19. Public Stairs (a. Photo taken by LR during the Photovoice Process (2018); b. Photo taken by Researcher during latest site visit, 2020)

II. *Children's Feedback*

After the photovoice session, feedback form was collected from all the LRs (n=20 in each site). Out of the total 20, 19 completed the feedback survey in site 1, while 18 completed the same in site 2. It helped in understanding, what changes and interests did they notice in themselves from the project, whether they were positive or negative about the process as well as if they wanted to work further for a change. Most of them said they learned a lot more about open spaces and their importance and also wanted to work in such projects in community. The feedback forms questionnaire is attached in Annex J, while the compressed questions for reference is mentioned below and the result is displayed in Figure 7.20. This result led to take further action with the little researchers. Out of the total eleven questions, ten are represented quantitatively but question 4 is only elaborated qualitatively due to the nature of the question.

1. If they know about child rights.
2. If they can influence decisions in their community.

3. Is children's involvement necessary.
4. Best thing and worst thing in your neighbourhood.
5. While taking photos if they noticed something new.
6. If they learnt new things.
7. If the project was beneficial.
8. If they were satisfied.
9. If more programs like this is needed.
10. If they can themselves conduct such programs.
11. If they would like to work further in this project.
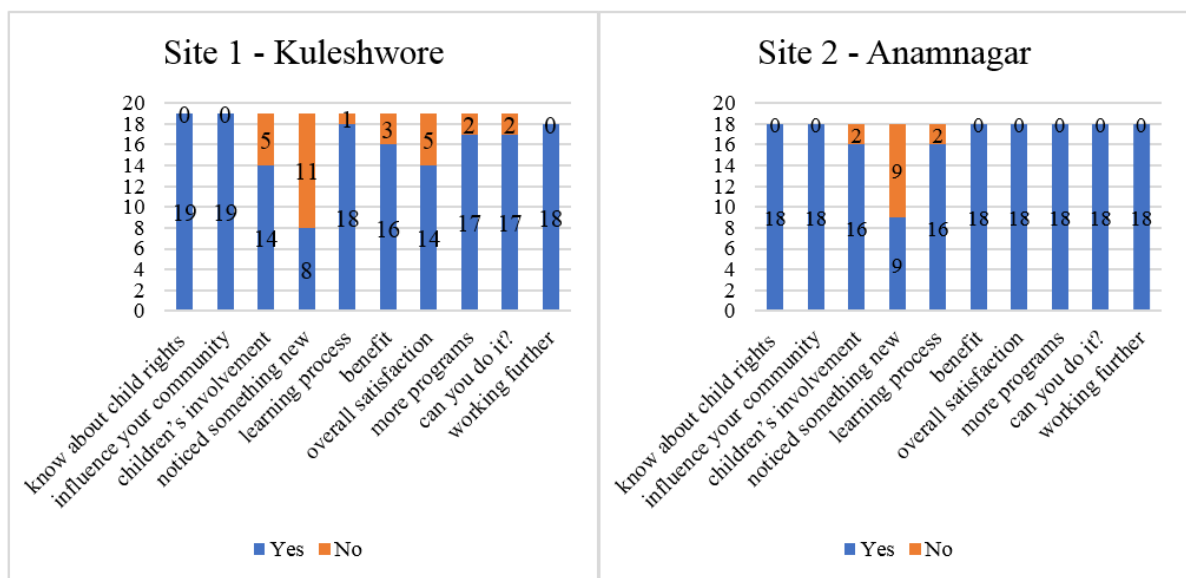
Figure 7.20. Little Researcher's feedback on the process.

For question 4, for the best thing in the neighbourhood most of them said, its community bonding, everybody is ready to help others. The worst thing is they do not keep the environment clean and also they do not take part in social work. For question 5 'did they notice something new', they mostly wrote, they did not see anyting new but showed the existing issues. For overall stisfaction, some said they were not satisfied because the program has to go into action otherwise there is no use. And for the part if they want to work further in the such projects, everybody said 'ofcourse' and 'defintely yes', except for one LR who said 'maybe'.

7.1.2   Action 2 – Cleaning campaign
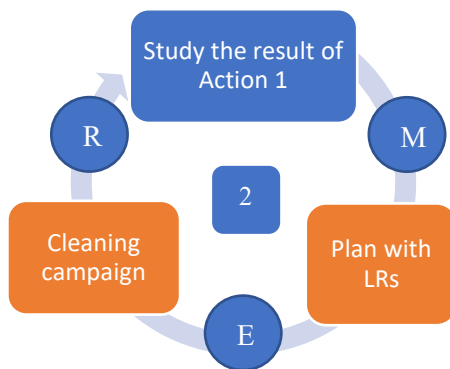
Figure 7.21. Action 2: Cleaning Campaign.

7.1.2.1   Study

Reflecting upon the solutions provided by the LRs in Action 1, also from their feedback and after my analysis, I went back to the research site to work further with the children. As it has been mentioned prior that a PAR is a cyclic/spiral process and to be able to work further meant that this cycle does not break. From Action 1, a list of activities or solutions which the children voiced out has been categorised. The discussion for this site visit was thus started with these ideas. Action 2 is a follow up of Action 1. It was found appropriate to work in one site, though the initial research was conducted in two sites due to time limitation and scope of this study.

It is mentioned in Growing Up in Cities (GUIC) project (Lynch, 1977) that when an action research is envisioned, it is always a good option to start with a manageable approach when there is a choice to be made. Hence, looking back at the Photovoice process, the action should be started with the site, where children were more open to cooperate and seemed truly interested to take an action. Though both sites showed the potential to do so, children from site 2 seemed more prepared to go to the next step.

Through SHOWED analysis, group discussions as well as exhibition and workshop regarding the open spaces around them (in their locality) in Action 1, proposals are drawn together with the LRs to maintain and enhance the situation of open spaces.

The solutions provided by the LRs are categorised. This categorisation helped to identify which of the problems could be solved by the children, in which ones they could work collaboratively; and in which problems they could raise their voices for action to the authorities and the adults of the community. The Table 7.11 shows the types of interventions that could be done by the LRs when it comes to open space planning and management. Hence, this comes under the theme "types of children's participation". This is also mentioned in Chapter 6 on genuine participation of children by Lansdown (2001) – consultation, collaboration and child led, as shown below.

Table 7.11. Types of Children's (Little Researcher's) Participation. Numbers in bracket represent repetition of the expressed interventions.

Raise voice - consultative	Collaborative - collaborative	Take action – child led
• Think about and make parks for people to stay, talk and sunbath, children and senior citizens (government and local people). • Take responsibility for the conservation and maintenance of all open spaces – community parks, temple areas etc. • Make playgrounds. • Proper infrastructure development with planning – no narrow alleys, bike lanes, road maintenance. • Provide basic amenities – dustbins in open area, footpath. • Make pollution free environment. • Maintain greenery. • Set rules and regulations - not parking in the no parking area, not throwing garbage in the open area etc. • Management of squatter settlement by the government. • Special area for dumping garbage. 3	• Encourage people to come to park and play (2) • Make responsible, counsel people about proper use of open space (2) • No throwing of waste in open area • Protest and make surrounding clean and use for good reasons (3) • Clean and maintain, preserve and utilise open area. • Proper disposal and management of waste – recycling. • Work together, consultations and mutual understanding among the stakeholders. • Request to make the school ground available for everybody during holidays. • Private plots should be requested to be available for the local people when not in use by the owner.	• Planting, greenery in open area, riverbanks (3) • Awareness programs for cleanliness, greenery • Awareness (programs) to know about open spaces and use (3) • Motivate adults also take care of issues – they should take responsibility and work on maintaining open spaces. • Cleaning campaign in the local area to make the surrounding better.

For the 'Collaborative' part, LRs were interested in making people aware of the importance of open spaces and their maintenance and also the importance of living in the clean and healthy environment. For the 'Take action' part, LRs were enthusiast to work together with concerned authorities to make the environment better. Therefore, the third column is important as the actions mentioned here can be child-led. With this notion the project was planned further. The tangible result that could be obtained was Cleaning Campaign.

7.1.2.2 Plan

Each site had around 20 children initially who participated in the photovoice process. This time, they were asked again for a voluntary participation. The children were from grade 8 and 9 from two schools. From school 1, there were altogether 3 children. The children who were in grade

10 previously had already left the school and it was not possible to get in contact with them and the children currently in grade 10 needed more time for their studies. In school 2, there were 10 children. They were explained in the first meeting about the next action and asked if they wanted to participate further in the project. Nobody said anything and just nodded their heads, confirming their participation. In the second meeting when it was time to do a joint meeting, all of them came, but only 2 remained from school 2, others left one by one saying that they had to take their classes or some other reason. This is how the researcher was able to get 5 interested children for the project. Altogether, there were 4 girls and 1 boy – 2 girls from one school, 2 girls and a boy from the other school.

Though in the feedback form and also in the first meeting almost all 20 LRs said they wanted to work further, the next meeting brought only 5 interested LRs determined to carry forward the project. This was a positive thing because at first, some of the participation was not voluntary and children were selected by the principal and school coordinator. But this session with children, ensured that the participation at this stage was genuine.

I had a discussion with the LRs about the solutions they provided to tackle the open space problems in Action 1. After the discussion, a proposal was made about the existing issues and how to tackle them. This was based on the Table 7.11. The action that could be taken immediately that would tackle an urban issue was cleaning the open spaces. Hence it was decided together with the children that a 'Cleaning campaign' should be organised. Then the proposal was taken to the municipality office of the local area (see Annex K). The Little Researchers (LRs) were not taken there for their safety. Permission was needed from both the school and parents to take them to the office. And to involve them politically in front of the elected officials was not the goal of the research. The intention was to make their voices heard and create a dialogue with those officials. The proposal was given to the officials, and a request to work in coordination with the LRs was made. After the discussion with the chairperson, secretary and the ward members, it was agreed that one work could be done together with the children. They were interested in the cleaning campaign too and ready to provide any form of logistics support.
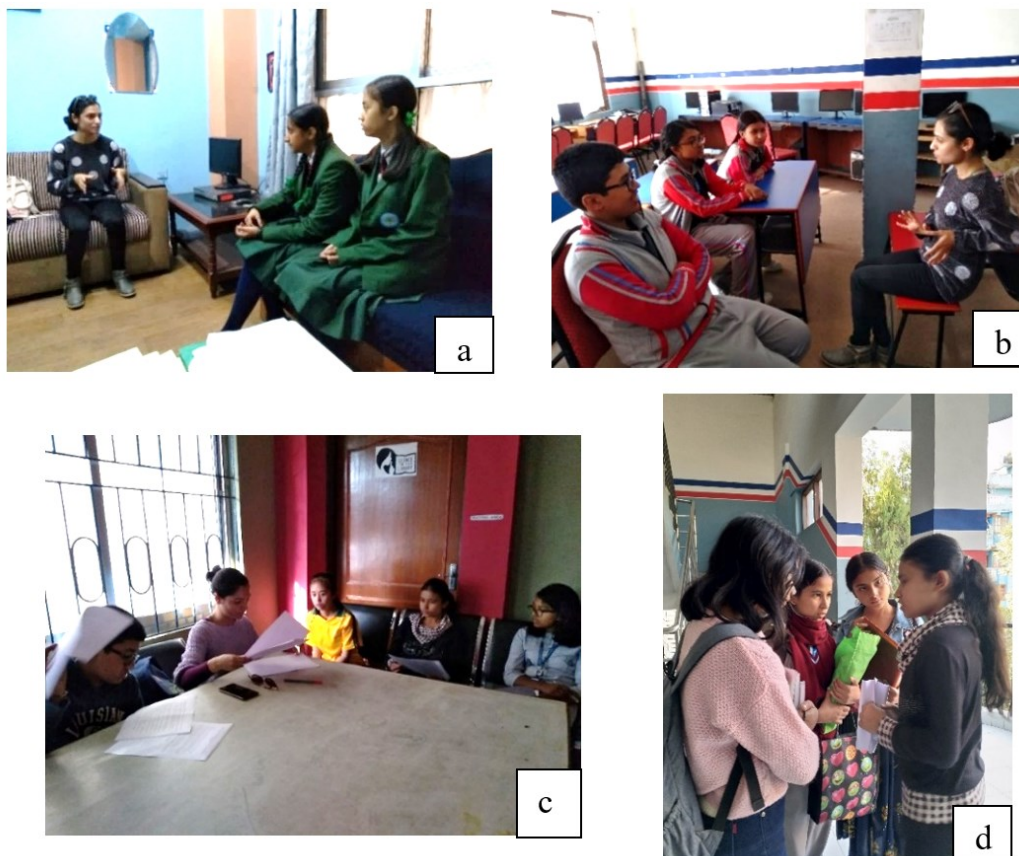
Figure 7.22. Multiple meetings: a & b: Initial meetings with the LRs in both schools. c: Follow up meeting after talking to the authorities – both schools. d: LRs convincing their friends to take part in the cleaning campaign.

Another meeting was held with the LRs on how to go ahead with the process of conducting the cleanliness campaign as well as raise awareness at the local level. Children wanted the event to be on Saturday so that they have enough time for the event. The authorities did not want to come to the workplace on Saturday as they had some event on that particular day. Hence few more negotiations were needed, and it was agreed upon that the session will take place in the morning in a weekday and the children would go to the school afterwards. Though they had morning extra classes, children were more flexible to participate in the event.

One more important part in this was that LRs were given the responsibility of bringing as many volunteers as possible for the campaign. It was interesting to see when I was at the school talking to them, they had already convinced other children who wanted to join the campaign but who were initially not in the project (Figure 7.22 d). Also, participation of grade 10 children was again restricted by the school as they were going to have their final examination soon. They came to me and said they wanted to work, and I should go and talk to the principal about it. At this stage, I did not want to influence my steps into these children led process so I asked them

to convince him themselves which apparently, they could not do. But nonetheless, at this stage the participation was fully voluntary.

7.1.2.3   Act

During the day of the cleaning, all the children gathered with other volunteers they had invited. A successful cleaning campaign was organised. The materials and logistics were provided by the local government and the workforce was a mixture of government officials, elected members, children and local people as well as traffic officers. I had initially suggested to the ward members that we can do the campaign as a formal program and children will speak first about the project and then we will start the process. But they (ward members) showed no desire to do so. Immediately after they arrived, they started taking out the sweepers, barrows, bags, gloves etc. to start the work. There were few local people who came in and talked a lot but did not give input in cleaning activity. There were few who were complaining that some people from outside the area come and throw waste here in the morning or night-time. But they were also folding hands and standing there. One good thing that took place was when a police van was passing through the place and they saw us cleaning there, they stopped and joined us. This was motivating to observe.

Figure 7.23. Glimpses of Cleaning Campaign. a: Little Researchers all set up for cleaning; b. Cleaning on the process.

At the end of the cleaning campaign, I gathered the children informally and then made a dialogue with the local ward members and officers. When it was not possible to do it as a program, me and the children had to somehow make it possible by changing our plans. When I was talking with the ward officials, I called the two students who wanted to speak, raise their voice and show enthusiasm to work further on such campaigns. They voiced their opinions

which I video recorded. This made the officials actually listen to them and agree upon their voices and suggestions.

Few quotes

"No, it's not because they don't know, they know, still they do not follow the rules." Ward member.

For this one of the LRs said, "Yes, but we need to make them aware. We have to keep doing these interventions. For example, if we provide more dustbins, may be people will eventually start to put their waste in the bins. But we must keep trying."

"If we keep on working on it, others will also join us, and it will be for better". – Ward officer.

7.1.2.4 Monitoring, Evaluating and Reflecting

I wanted to provide a platform for the Little Researchers to raise their voice during the event as that according to them would raise awareness and also urge the officials to do their duty. On the other hand, I had conversation with one of the influencing members of the municipality, he was not interested in listening.

Some days before the cleaning day, I called this member who lived nearby the site. And I told him that we would organise a small program which starts with a speech from the children for awareness and raise their voices. For that his immediate reply was "no". He said, "there is no need for dialogue, speech and formalities." He also said "The problem is not because people don't know, despite knowing also they do wrong things. If we talk something, they will talk more and give us speech. Hence, no need for that, let's just do the work". I was trying to raise voice of the children, but he shunned that saying he does not want to listen to any speech (*at this point, I thought of the politicians who give promising speeches but do not carry out their duties when the time comes, maybe it was the influence of that*).

Repeatedly, I tried to convince him that it is important to have a dialogue, the children will also feel important and will engage in such activities more. I also told him about all the work the children had done, and they just want to share their experience, but he would not listen. What ways could be used to bridge this gap of understanding? But as a researcher it was my duty to make him understand that children have a whole new perspective and if we listen to them, its beneficial for both the children and the adults. At the end of the cleaning process, there was hence an informal interaction among the children and the officials. And at this stage, the

officials did listen to the children. By collaborating and also taking lead in some phases of this cleanliness campaign and conducting it successfully, children gained the confidence of the officials. Hence, action part was very important to make this project a success as bringing change was one of the aspects of it. This was also mentioned by Chawla (2002), the tangible part of such process is important to keep everybody motivated. At the beginning when I was doing meetings and negotiations with the ward members, they directly said that "here everybody knows everything, no one listens to anyone, we don't need to listen to the children. they are the troublemakers." At the end of the campaign and dialogue between the children and ward officials, one of the ward officials said, "By children, I did not mean all the children, there are a few who are making the place dirty and you (referring to Little Researchers) are helping to make it clean."

Therefore, from not wanting to listen at all to engaging in a dialogue was a huge leap and sometimes being persuasive works. To be able to create the opportunities for the children's voices to be heard is important. It was very difficult to make them listen, and I don't know how much they really listened. But it was confirmed that we had a two-way interaction and agreed upon similar issues.

Figure 7.24. Interaction with officials to raise voice and awareness, glimpses in two images.

The authorities despite being of the same locality did not know how to approach the children. When I told them, I contacted the school directly and started the project and reached till this stage, one of them said that he will also take the same approach and talk to the schools. He further suggested that it is possible to do such programs every week, and more it is done, more others will also be aware and assist in the process. LRs said that simple gesture like putting proper dustbin in the street could control garbage disposal in open spaces. Children are confident that if these kinds of programmes are organised more often and if awareness campaigns are held, it is better for the community to understand the scenario and be responsible. Repeated actions like these could help to build the trust and relation among the citizens and feel connected to the neighbourhood.

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7.1.3 Action 3 – Exhibition in larger scale and making a park
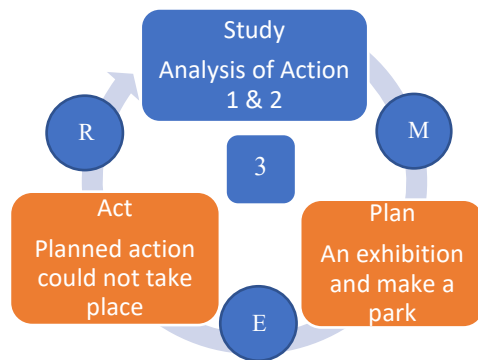
Figure 7.25. Action 3: Exhibition and make a park.

Study-Plan-Act

As the topic of this thesis is 'Planning open space with the children', to conclude the research finding it would have been a feasible step to make a park in the community. The process was going on smoothly, everything was working out. The researcher had built close ties with the local ward office, the local school, community groups – teachers as well as children. The children who genuinely wanted to work further on the project came voluntarily hence everything was going as per the plan. Two important suggestions given by the children were taken into consideration.

1. Making a park to set an example how collaborating with children can bring about a positive change as per the process and the outcome.
2. Raise awareness about parks and open spaces and the importance of cleanliness in the local area.

For point number 2 given above, there were different approaches, one was taking action, thus cleanliness campaign was organised. Children needed to gather the locals as well as researcher had to ask for the permission of the local ward office to support the process. This was done as Action 2 and was completed successfully.

During informal sessions with children, there was discussion regarding how more awareness could be raised. At the course of these processes, it was realised that the result obtained together with the children needs to be shown to the policy makers, concerned authorities as well as the stakeholders to make bigger impact. Initially, this was done in small scale, within the school premises. But during the phase of analysis, it was realised that an exhibition in a larger scale with more formal invitations would bring about an active participation and voice of the children in the context of the study. Hence a large-scale exhibition was thought of. In this exhibition, the invitation would have been sent to various personnel. Local people, parents, teachers as well as experts and activists working on areas related to urban planning, child rights, community development would be asked to give their views regarding the whole process of researching and working with the children. Their feedback would be added to the final results.

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This process was completely halted because of COVID-19 pandemic.

For point number 1 mentioned above, discussions and sessions were carried out in an open space with the ward members, community groups, local people and children to make a park. Multiple meetings were conducted maintaining social distancing. But this plan was also not successfully carried out due to various reasons. Though initially, ward chief and members were ready to provide fund for the construction of the park, many groups had different interests and their ideas had to be listened to but also as a researcher to convince them is also an important task. To reach the main goal of working with the children a lot of obstacles had to be faced, especially due to COVID-19, the participation of the children was limited. Hence this plan was cancelled as well.

7.1.4   Action 4 and 5

Due to the COVID-19 pandemic and its effect also in Kathmandu, there were changes in the final exhibition that was planned to raise awareness in larger scale as well as making a park (Action 3). As it is a Participatory Action Research, the process is flexible and the data collection phases are different and sometimes, repetitive. This flexibility of approach helped to revise some of the planned steps that could not take place due to the lockdown in the research site. Hence, cancelling Action 3 and exploring new approach, Action 4 and 5 was planned.

Here are the steps taken:

Action 4. Group meetings (virtual) with children to discuss further plan about the process.

Action 5. Unstructured interviews with the experts in different fields.

7.1.4.1   Action 4 – Virtual discussion session
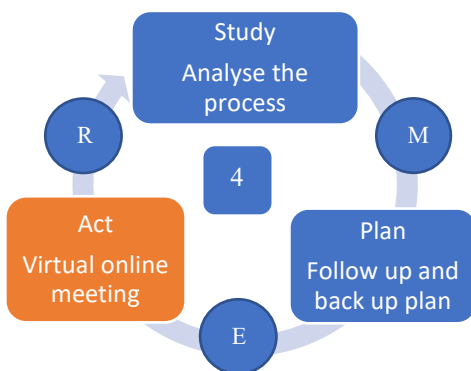
Figure 7.26. Action 4: Virtual online session.

A.   *Study*

Study phase of this action cycle has been done in Chapter 7.1.4. After analysing the whole process, it was observed that one of the main solutions provided by the LRs was generating awareness regarding open spaces and their importance.

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B. *Plan and Act*

Accordingly, this virtual session was planned so as to discuss further on what would generate awareness in the locality. For this, I again contact the school principals and coordinators, asked for permission to work further with children, explained them the whole scenario of COVID-19 pandemic and how a virtual session would bring a level of awareness for other children. They agreed to organise an online meeting and facilitated the process. In the course of discussion, I proposed an idea of an awareness installation that would be designed by the children of the area. All the children on the online session agreed to this. An online data base was created to answer few questions as well as give idea for the installation. Many children participated in this and also got to know about the project which was carried out with the LRs. The children present in the online session were asked to share this online platform to others too. This helped to spread awareness regarding open spaces as well as include more children in the process. As the task was easily shareable in social media, it was interesting to see participation from children from different neighbourhood and schools. Altogether 72 responses were collected. The question they answered was:

- An installation that symbolises identity, community bonding, awareness, creativity, playful area, social activity, inclusion, greenery, etc.

C. *Monitoring, Evaluating and Reflecting*

All the responses were thematically analysed. The result was corresponding with the types of solutions the LRs had proposed in Action 1. Though the question asked was to objectify the 'awareness' as an installation, the children gave answers which were quite similar to the solutions provided by LRs, as pointed out below:

- Awareness about beauty of nature, Awareness and greenery, Awareness program.
- Make environment clean, free of diseases.
- Make use of open spaces for all, we benefit ourselves.
- Participate in the program - Clean my surrounding.
- Make Park, playground, temples for cultural activities.
- Jogging places free from vehicles.
- People's preferences – democratic thinking – opinion of people.
- Mutual understanding, cooperation, etc. with no discrimination in any basis.

- Use social media to spread knowledge, display boards to showcase in schools and public places, create awareness through different media – television, radio, social media, and motivational drama regarding the topic.
- Overall creativity.

In addition to the similar answers, there were some more general suggestions as well, and are pointed out below:

- Conserve forest, botanical garden, ecosystem, sustainable and nature friendly development activities.
- Demarked open spaces with proper land use planning.
- We need to protect our environment and develop our lifestyle simultaneously.
- Balance of nature and humans.
- If a person really wants the change, they must first bring the change in themselves.
- There should be establishment and protection of animal conservation area and animal care centre for street animals.

Some of them went beyond the scope of the project and said, "It's not an object, but an overall good environment should be maintained. An area that is established by following the principles of sustainable development which shows our identity and preserves it for the future generation." Likewise, one child highlighted the intangible aspect of open spaces, "thought of people that are living around us. If they think to live a good environment and change that thinking into possibility to make the environment a playful area, a zone for social activity, a place having greenery, inclusion, creative area, etc. I guess no installation of any objects are required to bring these stuffs in our society."

7.1.4.2 Action 5 – Interview of the experts
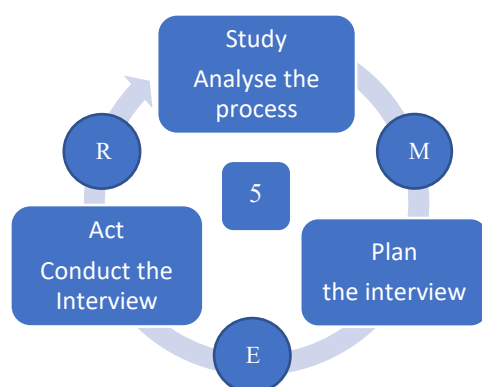
Figure 7.27. Action 5: Interview the experts.

A. Study

Study phase of this action cycle has been done in Chapter 7.1.4. After analysing the whole process so far and from the result of Action 3, this action cycle was planned.

B. Plan and Act

Expert interview was conducted with two experts – Urban Planner and Urban Activist, during the lockdown

phase, it gave an opportunity to validate the findings with the little researchers. As it has been emphasized many times in this research that participation is crucial for children, to bring a meaningful participation the adults who are directly working with the children's environment are essential part of it. To know their perspective in this regard helped to give this research a post direction. Hence this process did not involve the children directly, but it helped in backing up the data observed from previous actions. The interviews were conducted online, recorded, transcribed and thematically analysed. Summary of the interview is provided below along with common key points of both experts.

C. *Monitoring, Evaluating and Reflecting*

Expert 1 – Urban Planner

Excerpts from the interview:

The power given to local government is a very new part of the constitution, and hence, the local bodies are confused on how to use this to manage their wards – they lack the capability. With the massive earthquake in 2015, the importance of open spaces has been realised but working with children is a completely new topic. If a park for the children is to be made, it requires investment, provision according to age group – to play, it should be sustainable. There seems to be no long-term planning for such. Along with other development plans, children's spaces should also be one of the mandates. Its benefit may not be measured through monetary value, but other parameters must be analysed and should be taken as a long-term asset. The local representative knows about their locality, more than the mayors or ministers. Before, they knew about their area and if they wanted to do something, they had to go for the minister's approval but now the power has been given to them. Community development – local representative – an inclusive one, clubs – local youth clubs, community user groups, different organisations – like *aama samuha* (community women's group), schools, ward/community police force, influential people of the locality – political, experts, retired government officials etc. all must work together.

Coming to open space planning with children, he thinks this is an integral part, which has not been addressed so far. Open spaces for rehabilitation, aesthetics, rescue, breathing spaces has been done before. Looking at them through the perspective of the children, through their lenses is a new and milestone topic. It can help in literature.

<u>Expert 2 – Urban Activist</u>

Excerpts from the interview:

He said that it is important first to inform the public about different criterion of urban issues. To make people capable first of comprehension is very important. Activists can go ahead and form groups to certain social/urban issues, but academia, government agencies and civil social groups have larger role to bring about urban transformation. Children in our cities, are not living their childhood. The way they go to schools, the way they are living in their neighbourhoods is a pretty sad story. We really have to work on it. Working at the grassroot neighbourhood level in connection with the local ward offices is important. As a cycle friendly city activist, he has formed an organisation together with other activists to institutionalise their activism. It is only when the work is done in collaboration, the higher goals can be achieved, as he said.

Both believe:

- Open spaces are very less in the city.
- Working at the community level is important.
- Connection with other agencies with similar purpose – collaboration is essential.
- Children specific plans and policies are necessary.
- Child friendly methods must be used for urban integration and regeneration.
- Child friendly infrastructure are needed.
- Open spaces are being preserved but working with children is not heard of – should be prioritised.
- Local bodies have the power but not enough expertise to carry forward such projects – hence intervention is a must.
- It should be taken as investment.

These all points support the Participatory community planning approach taken.

7.2   Findings

7.2.1   Children's Result

From children's perspective the result obtained through each action part are as follows. Actions 1, 2 and 4 were taken together with the children. Some planned actions (Action 3) such as exhibition and making a park could not take place due to various reasons (mentioned previously). Possibility and probability of further actions has also been mentioned in the Figure

7.28 below. Action 6 is one such example. Action 6 is taken as a follow up of Action 4 as there was a concept of making an installation to make people aware about the importance of open spaces.

We can see from Figure 7.28, in different action cycles, different results were obtained. Children identified the types and categories of open spaces by themselves, identified issues related to them and who are responsible for them. They further deepened the issues, their causes and went on step forward on how to solve them. They proposed their solution to the public and authorities, hence raised the voice for the process.

Action 1 – Photovoice methodology	Action 1	Types and categories of open spaces
Action 2 – Cleaning campaign		Issues in the open spaces
Action 3 – Planned bigger exhibition and making a park		Themes of issues
Action 4 – Virtual online meeting		Solutions/interventions
Action 5 - Interview the expert	Action 1, 2	Actors or responsible bodies
Action 6 – Awareness installation in public space	Action 1,2,4	Types of children's participation

Figure 7.28. Action 1 to Action 6 of Participatory Action Research. Action 3 could not be conducted, Action 5 did not involve children, Action 6 is recommended further, Action 1, 2, and 4 was done together with children.

Overall, it came out as a concept on how to manage open spaces in your neighbourhood and city. This was for the Action 1 part. In Action 2, children took the lead to complete the cleaning campaign. Their confidence and participation level had increased, and they even had conversations with the local authorities about further work. During the Action 4, those children who had participated in the photovoice process, explained about the open spaces and their importance to other children who had participated in the session. In Actions 1, 2 and 4, the types of participation were different.

In the Action 1, collaborative approach was taken. In Action 2, children were more involved in the process, and they initiated certain task by themselves and in Action 4, children took the lead and explained about research to other children. Hence, the type of participation changed according in different stages of the action cycles. Children are interested to work further in the process, and they understand it is important to continue such processes and to make people

aware about their environment. Action 3 could not take place due to various circumstances and Action 6 was a proposed further action.

7.2.2 Researcher's Result

7.2.2.1 Analysing Children's Relation with Bronfenbrenner's Ecological Systems

As it was mentioned in Chapter 6 'Developing a methodology', again looking at the whole process through Bronfenbrenner's ecological systems, a child's environment is affected by different systems in the ecological model. I analysed the interaction of different concerned parties whose direct and indirect influence was seen in the process of the research. The involvement of the children was a crucial part of this research. Generally, children's behaviour with the bioecological system was observed. These are taken as external forces affecting the actions taken with the children.

Children in General

School 1 and 2 in Site 1 – They were not so expressive, do not speak up, only very few were confident and put their points strongly. They were not so prepared for the presentation too. They went with the flow and had very less to say about their work.

School 1 and 2 in Site 2 – Highly disciplined but not shy to express and speak up when needed. In both of the schools, when they were giving presentation, they were very prepared. They structured the process and put forth their voices very strongly. In site 2, children were more organised and acted like professionals, this might have been because the schools were bigger and had more exposure to the outside community.

In both sites:

All the children were very supportive to each other. During the group discussions, all four schools in both the sites were very expressive, speaking up, supporting each other. If one LR was confused or got stuck while talking, his/her friend would complete the sentence. When one of them said about some very important issue in the open spaces, other would applaud and give thumps ups, supporting their idea. Their participation and involvement increased as the project was developing.

Authorities of the School – coordinators and principals

Children's behaviour in front of the school authorities was different as compared to when they were alone. A bit shy to express their ideas in front of the principals, especially during school hours and school premises. During the workshop and exhibition day, all the children were more open and comfortable. When I approached them, they were very enthusiast to share their ideas and confident too as compared to first few meetings. The principals of one school in both sites provided the school premises for the exhibition. In Site 1 Kuleshwore, the principal was very supportive, involved and enthusiast about the whole project. He was helping the children to put the posters up, interacting with the community groups and encouraging them to listen to the children. In Site 2 Anamnagar, principal from one of the schools was even participating in the group discussions and giving input on the issues taken out by the LRs. The only concern they had about the process as it was taking some time, was about their student's studies. Otherwise, they were very supportive.

Authorities of the Government – ward members

They considered children as the nuisance creators, they had no desire to listen to them, not only children, as a local representative, they did not care about the voice of the locals too. The ward head does not have any time to listen to the public. The ward members who are supposed to take the local voices to the ward head are afraid of him. Hence, not taking up my requests for collaboration. Then I had to make personal, separate calls, to convince and make them understand the need for such processes. This highly unconfident behaviour of the ward representative is something to be thought about. But during the organisation of the cleaning campaign, a rapport was built amongst the authorities, children, local people as well as cleaning helper groups. At the end of the session, the authorities even listened to the children's voices and promised to conduct more of such programs.

Local People

The local people were very enthusiast. They were positive, actively involved in the exhibition, asking questions and interacting. Some adults who came to the exhibition also tried to put themselves in the authoritative position. Asking questions like 'should the houses and industries be together' and when the little researcher said no, applauding him for the correct answer. Others were mostly supportive to the children as well as for the project, one of them appreciated by saying 'it may seem simple, but someone has to do it!' Hence there was an overall mixture of comments, but this kind of interaction is essential part of PAR. Policemen from the nearby

police beat were also invited and they came to see the exhibition and interacted. During the cleaning campaign, too, few locals and local police officers joined but few others, just stood there watching and complaining about how the place is not kept clean and people from outside come and through waste there.

Parents and Family Members

The interaction was seen in the workshop and exhibition day. Children were comfortable and proud to show their work to the parents. They were accompanied by younger siblings, and they were also excited to visit their brother's/sister's school.

Community Group

Community groups were not very supportive at the beginning, and they were blaming the children to be the negative aspect of the environment as they believed children are the ones littering and making noises. This was at the beginning and during the project but when the exhibition took place and there was interaction among them, community members were listening to the children with interest and there was a mutual conversation and understanding – thus start of participation.

Experts

Experts were not in direct interaction with the children, but they did believe in the ideal situation of children's connection to their environment. They supported the idea that children need to participate in community planning process, and it should start as a system and methodologies should be developed on how to make the participation effective.

Time Factor

Time factor is also important part of this relationship as children who wanted to take part further in the research were not allowed to do so as they were in grade 10 and they had to study extra hours to prepare for their final board examinations. Also, a major context in this was the COVID-19 pandemic that occurred while working with the children that hampered their participation. Some planned actions could not be taken as there was a need to stay isolated or socially distanced due to the pandemic.

7.2.2.2 Justifying Methodological Approach

Going back to the methodological approach (derived from all the philosophical and theoretical backdrop) of the process of working with children (see Chapter 6.4) and analysing if the process was as described. Below is provided the justification for the methodological approach as:

Democratic – Children identified issues in their environment without anybody's interference, they prepared their own presentations and designs. Even in the later phase, they organised the events by themselves, as far as possible. They were given the freedom to arrange their photos, texts and stories and present them in their own style. This freedom they enjoyed a lot and worked on the project with full enthusiasm.

Transdisciplinary – Though it was asked for them to look at the open spaces in general, the diverse observation from the children themselves showed that a holistic approach must be taken. They understood the issues of environmental hazards, social injustice, religious values etc.

Action Oriented – Series of action and reflection from Action 1 till Action 5 shows that a PAR process can take many actions once it is started. Immediate changes were observed in the behaviour of the adults who were present in the exhibition, and a place was physically transformed in the cleaning campaign.

Critical and Reflective – It was important both for me and LRs to be aware of the existing situations, hence be critically responsive. To make the PAR process fully successful prior knowledge is important. Children critically reflected upon their ideas in the group discussion and reflected upon the process during the exhibition day.

Transformative – The action part in the photovoice process raised awareness and ensured participation of many stakeholders. Many issues were brought forth by the children and positive change in the neighbourhood was observed. The cleaning campaign ensured an immediate physical change in the neighbourhood which motivated many in the process.

Educational – In the feedback form, most of them said they learnt a lot during the process. They understood about open spaces, their types and functions. They also learnt about waste management and disposal. The most interesting part was this teaching was not done by me, but they learnt from each other. Hence, this supports Dewey's (2002) belief of education.

Flexible – If I went with a fixed plan, then my chance of conducting a successful project would have been low. As in the action research, I worked with many stakeholders, I had to be flexible with their working style, their understanding and so on. Hence, I had to choose methods that

could be changed, added or removed as per the site situation. There had to be enough flexibility of time too. For example, Ward chief is a very busy person. You could not make an appointment with him, unless very important, but visit him as soon as he arrives at the ward office, in between his other duties. Children's school tasks and other activities sometimes made it difficult to meet them as well as the timing of two schools was also a challenge that could be addressed by flexibility of approach.

Adaptive – Various stakeholders were involved; hence a lot of negotiations were made. In one site, the principal gave permission to conduct the exhibition at the school grounds also during the weekend but in the other site, the workshop and exhibition had to be done on a school day, hence many parents could not come. The COVID-19 brought yet another challenge to the whole process but as the initial action had already been conducted, the later process could be adapted to fit the context. For example, the planned large-scale exhibition could not be conducted physically, hence other actions were taken, such as online sessions and surveys with children. Hence, instead of halting the whole process, some adaptation was always required.

A Continuous Process – From Action 1 to 5 some actions could not be completed, Action 6 is recommended. After the first action process, the children's feedback form showed that they were interested to further work on the project. When the Action 2 was taking place, the LRs gathered more interested volunteers for the cleaning campaign. After this session, they talked to the local authorities that they want to continue working like this for their neighbourhood. This shows that a continuous cycle of action and reflection is needed.

7.2.2.3 Validating the Methodology

A continuous spiral of Study-Plan-Act with continuous Monitoring-Evaluation-Reflection (M, E and R) proved to be a valid methodology on working with children. Combining all the actions taken in this research (see Chapter 7.1), some actions that could not take place and some that could be planned further, the overall methodology looks as such as shown in the Figure 7.29. This methodology can be used as a tool by researchers or anyone who wants to work with children to make them aware about their environment, make them capable of decision making and critical thinking, and in the process, improve their environment or bring a social change.

The methodology developed showed that a process is cyclic, and each further action is guided by the previous reflection. The number of spirals could be less or more as per the contextual requirement and feasibility of the research. As it has been mentioned throughout the process

that some plans had to be altered because of different site circumstances and hence, some of the actions planned did not even involved children but were used for triangulating the data.
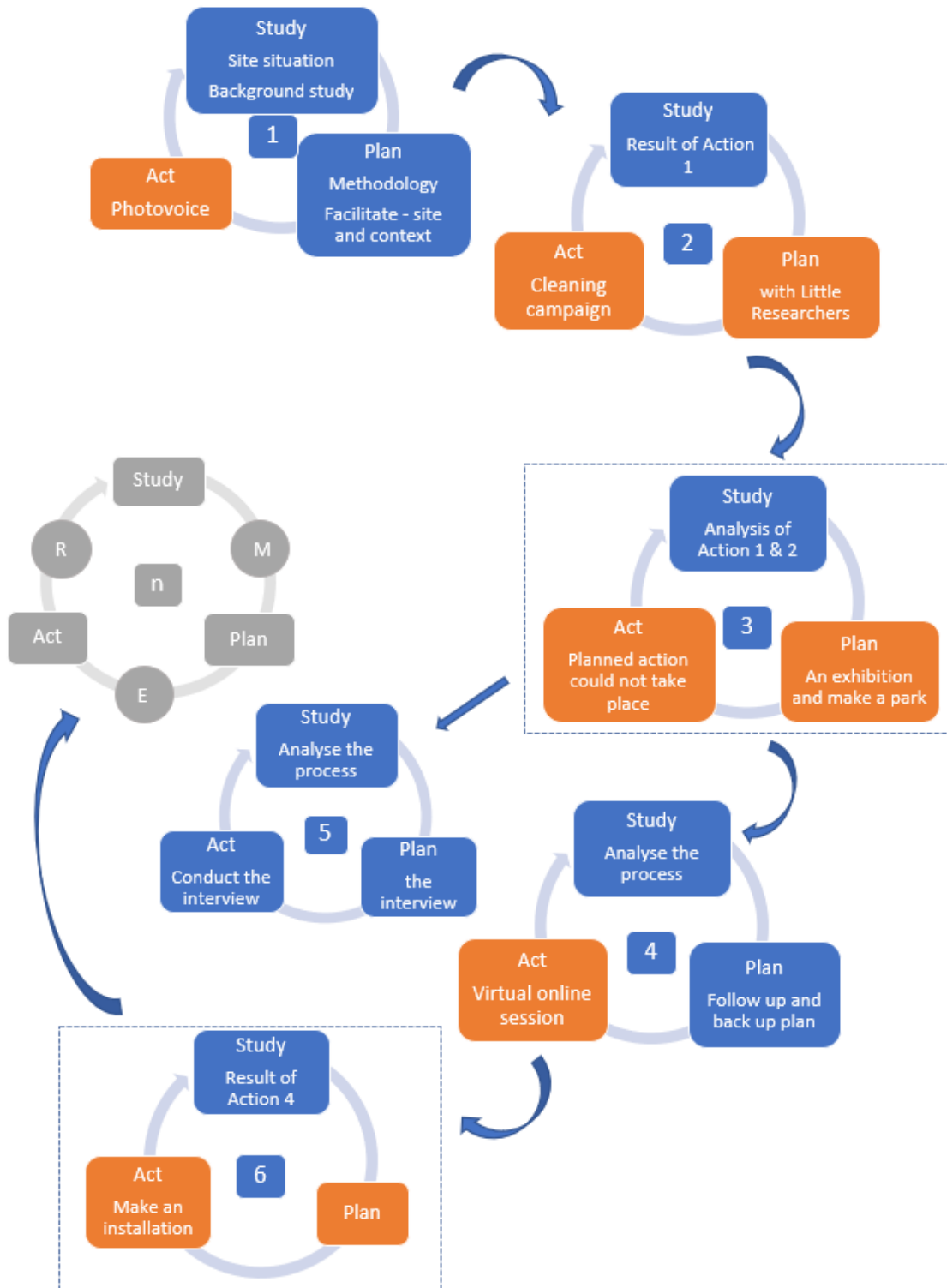
Figure 7.29. An ever-expanding spiral impact – a cyclic process with continuous spiral of action and reflection. Monitoring-Evaluation-Reflection takes place in each cycle of Study-Plan-Act.

In the Figure 7.29, it has been shown that the action that has been done in collaboration with the children are coloured orange while the ones planned and done by me are coloured blue. Hence this adaptive model can be used with flexibility, by any discipline, by altering participant's involvement, changing the actions upon disturbance by external factors, critically examining and reflecting upon the actions, transforming the existing scenario and moving into further action. In the figure below, the numbers 1, 2, 3 and so on represent the number of actions taken, 'n' shows that the cycle can continue into many numbers of actions. The action cycles can continue into new cycles as well as the first cycle could be repeated after a certain time because the issues identified earlier might change with time. It was learnt from literature review too that a city or a neighbourhood is always changing. Hence this cyclic method of research proves to be an ideal approach while working in community issues.

Some actions may not take place as planned and hence there should be flexibility of approach. Action 1 and 2 went as planned, Action 3 could not be conducted and hence the change in plan brought about Action 4 and 5. Action 4 showed involvement with children and Action 5 did not involve the children directly but supported the findings of the research. Action 6 is a suggested further action as a result of Action 4 – to make an awareness installation. The planned action that could not take place – Action 3 and the probable action that could be taken – Action 6 are represented with dotted box in the Figure 7.29. The action represented with grey colour and number 'n' shows that this series of action cycles can be continued into infinite loops thus representing the need for continuation. Here, M, E and R are also shown which are the monitoring, evaluation and reflection of the process. This exists in each cycle, hence shown only in this general cycle.

The deeper we look into each cycle, the steps will increase and it could be detailed out. Figure 7.30 is representation of one action cycle with detailed steps. This figure can also be compared with model 1 and model 2, previously presented in Chapter 2 (cf. Figure 2.2) and Chapter 6 (cf. Figure 6.6) respectively.

As we take a deeper look in Figure 7.30, we can observe that the methodological approach of working with children has been justified with this model. It has been clearly mentioned prior too, and I emphasize again, that the blue colored steps are done by me as a researcher and orange colored steps are in done in collaboration with the children. Here, since the figure represent Action 1, only Act phase had been done with the children. This participation can also be

different as we move on with the research or we take a different approach altogether. One can already start working with the children from the study and planning phases too.
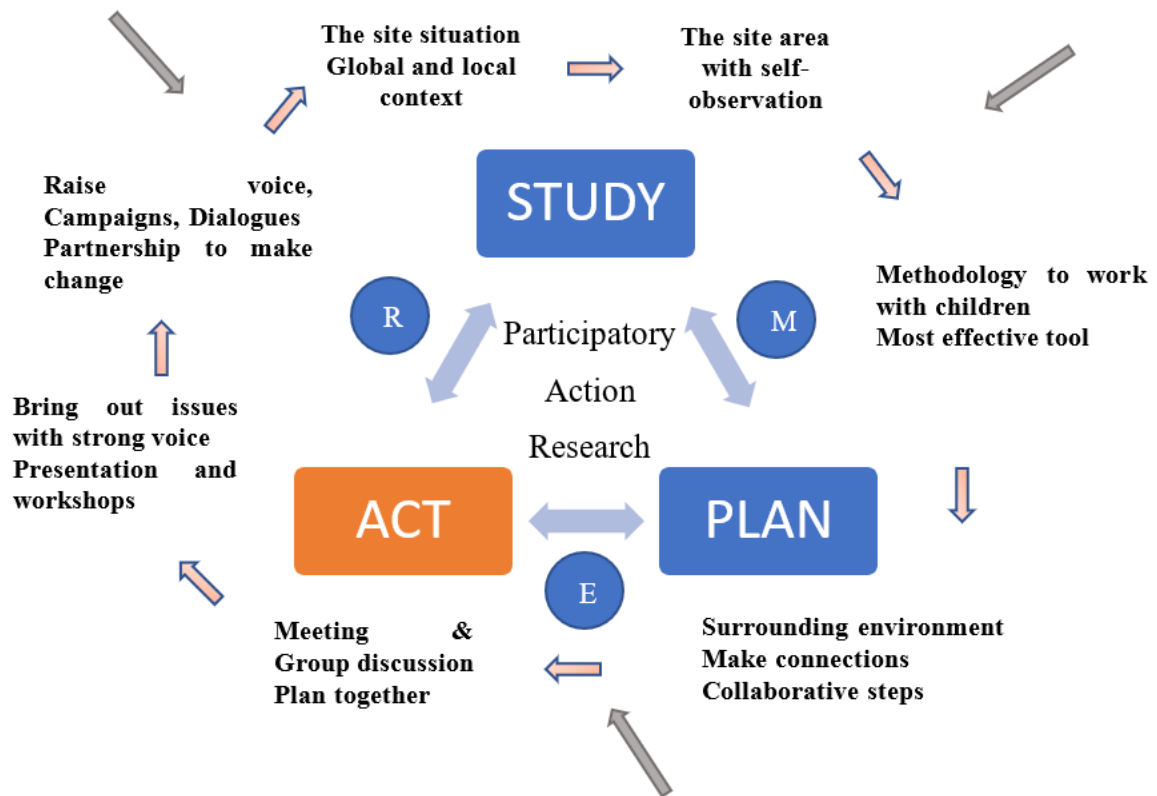
Figure 7.30. Detailed cycle: Double step details: General Participatory Action Research cycle and Detailed methodological cycle. M, E, R are the continuous Monitoring Evaluation and Reflection of the process.

STUDY-PLAN-ACT being the basic cycle, the outer represent the steps in more detail. M-E-R are the constant monitoring, evaluation and reflection of the whole process. Study phase of the research was started with understanding the site situation by reviewing documents, case studies of local and global situation and then by self observation of the site by the researcher. Likewise, in the plan phase, methodology of working with the children was developed and then the contextual scenario was studied along with facilitating for the planned Act phase. Then the Act phase was started with the participants of the research by conducting meetings, building platform and tools to bring out the participants voices etc. Further study-plan-act is then decided by monitoring, evaluating and reflecting (M-E-R) upon all these process as shown in the Figure 7.30. The black arrows are the external forces such as interference or support of different stakeholders as well as timing and prevailing situations.

7.2.2.4 Critical Overview of the Methodology

In the action spirals planned, there was a lot of alteration needed in the process. Some of the planned steps could not be taken. The planned big exhibition in March 2020 had to be cancelled

as there was a high risk of COVID-19 infection surge in the research site. While working on a Participatory Action Research (PAR), these instances could be taken as negative as well as an opportunity to search for new methods or steps. As a follow up of that, virtual sessions were planned with the children in both sites. This helped in getting more children informed about the activities done by the little researchers.

The most difficult part was to get in touch with the local authorities. This hampered the overall process of the data collection. I had to be very flexible with my timing, and patient too. As the ward chief was a very busy person with a lot of instant duties, even though the meeting was prescheduled, I had to wait long time, or sometimes, did not have the chance to meet him. Once I had to go to the office immediately because one of the spokespersons told that the chief is at the office and he might not be there for a long time, so come quickly if you want to meet him. Therefore, the success of such PAR hugely depends upon the stakeholders.

It is important that you plan ahead of time and show a lot of patience while working with the community. Also, sometimes it might be overwhelming or even frustrating to involve many stakeholders at a time, because of different time availability and interest. Conversely, it is an important aspect of PAR to involve as many stakeholders as possible. It is the duty of the researcher to facilitate such platform.

Rejection and dismissal might be major issue while working with the ward members. As the elected body are hesitant to listen to the community especially children, it was a challenging task to overcome. Schools are supporting agencies in such processes but if sometimes the process takes too long and they do not see any immediate benefit to the children or the institution they might also start doubting the process and show repulsion. In such instances it is very important to balance the relation and role with the school representatives. Appreciation of support, merits to the students who want to participate etc. could be some of the examples of doing so.

The easiest part was to involve and work with the children. They showed excitement from the very start. Their eagerness to learn and to give back to the community was very motivating. Adults in the community do not have the time and motivation to be part of such processes but children on the other hand can act as catalyst to do so. Sometimes, children may not understand what exactly their roles in such participatory approaches are. Though in schools they learn about taking care of their environment, sometimes they cannot relate to the idea that they could go ahead and start cleaning. When such platforms are provided at the beginning and a change is

noticed by the process, they might get inspired. It is difficult to observe and understand the potential of each child in such process, hence sometimes we might also lose some participants because we could not explain them the project very well. In such cases, personal interviews might help according to age-appropriate inquiries.

In this research Action 1 was the most important part and the data analysis and findings are based on this part. Other actions were simultaneously taken but they had lesser impact and some actions could not be taken at all. If there was more time and if repeated attempts had been made, further actions could have been possible. But there was a limitation in terms of availability of time and resources to make further attempts. Hence, a researcher has to be able to pre plan as well as know when to stop the research when there is enough data for the scope of work planned.

Looking at the overall scenario, children and their environment as compared to Bronfenbrenner's ecological system theory, comes into play. Children's participation hence is not a task to be assigned but a process to be developed with gradual practice. If we want to make our children ready for the future, responsible and caretaker our environment, we must make them capable of doing so with gradual practices. We must also work towards the mindset of the stakeholders who are responsible for creating such environment and opportunities for the children. From this research it is clear that this is the hardest part to do. Nonetheless, children's solution for this issue was also creating 'awareness'. When the authorities were strongly shunning the voices of children saying that 'it is not important to listen', 'people need to work not give speeches', 'everybody knows but they still do it', children went ahead of the problem and started to find solution. They said, 'everybody's responsibility is nobody's responsibility', therefore 'everybody must work hand in hand to make our open spaces better'.

Participatory Action Research comes with critical overview that researcher's pre knowledge and concepts could hamper the findings of the process. For the morality of this research, I have separated my (researcher) findings and children's (participants) findings and then done a comparative analysis to show that both results were as per the mentioned objectives. Though the frameworks were guided by me, the detailed and context specific findings were solely children's own ideas which I have taken as their voices for this research. Interpretation is only done for the whole process so as to develop and validate this methodological approach.

7.2.3 Summary

Summarising the whole process of 'Planning Open Spaces with and for the Children', it could be seen that the hypothesis presented at the beginning of the research seems valid:

1. The situation of Open Spaces in Kathmandu is poor. Children are not getting enough outdoor explorations. Children are not considered/consulted while it comes to the situation of their environment.
2. Children are able to observe, understand and even solve issues related to open spaces. They can raise voice for the same. A participatory model to engage children in such process could help bring about a change in the society – tangible and intangible.
3. It is a process and not a project to start and end. Thus, needing continuation. The result could be that we have better urban/community spaces.

Both mine (Researcher's) and children's (Little Researchers') observation showed that the open spaces in Kathmandu are very scarce, not well maintained and not equally distributed. Various reasons such as poor infrastructure, safety, polluted environment restrained children from exploring their environment. Nonetheless, they were able to observe their environment and show it through their lenses. The issues identified by the LRs in both the sites were similar. To back that up with previous studies, in Chapter 5 (Case Study) too, the interventions proposed and done were similar to the ones provided by LRs. Nonetheless, there were a few site-specific issues too, which could only be observed by people actually living there. This is an important point to notice and thus justifies the use of PAR too.

They were able to look at the open spaces in a holistic manner, as was proposed by Hart (1997) to look at environmental studies in a comprehensive way. Open spaces are not just physical spaces, but they showcase history, social relations, power roles, discrimination, aesthetic values, and all these were mentioned by the children.

The further actions taken; the further children's capability was increasing. In the first action, they showed their perception, did discussions on the topic to come to common point, explored critical thinking as well as raised awareness regarding the issues in their neighbourhood. In the second action, their own result gave start to a new process, of raising awareness by doing an activity. And this time, they took an action – a tangible solution was proposed to the municipality. During the cleaning campaign, they worked together taking responsibility to finish the job. On further actions, the LRs had an opportunity to share their experience and knowledge gained, they explained their peers about the topic and process as well as made them aware about open spaces. Hence, it was observed that the continuation of the process increased children's participation as well as helped in generating more awareness and information regarding the topic.

The concept of using photography by the community members to have their say in the decisions regarding the issues of importance to them seems challenging. But this technique of giving them voice to speak out in front of the policy makers and to be heard has certainly amplified their concerns. As mentioned, several times previously, where even the voices of the adults are not considered, working with children could act as a needful catalyst to bring about a social change as well as empower not only the children but the community as a whole. The most important part is to give the process a continuation. Hence, it was important part of the project to connect the local authorities with the school and the children, children with the community groups, local people to the school and so on.

8 Conclusion

This research is set in the urban area of Kathmandu, Nepal. When working on whole to part approach seems hard, one should take part to whole approach, also known as bottom-up approach. For bringing about a change and improvements in a city, this approach seemed beneficial. I did a lot of background study before starting my doctorate research. My experience after my master's thesis was backing up this approach. There may be flaws in the policies regarding open spaces but even when they are good, until they are tested on site and an action is taken, we do not see any changes, or we do not even know if the processes work in reality. Working with the adults in the community to improve their neighbourhoods could be an effective tool but to work with the children was even more impactful. Hence, children involved in this research are the participants and coresearchers whom I have called 'Little Researchers.'

We talk a lot about what should be done, how it should be done, but until and unless we come with the approaches of 'we must do it' as was mentioned by of one of the Little Researchers (LRs), the change is not possible. And one of the main aims of this research was bringing about a change in the society. In research site 1 (Kuleshwore), tangible change noticed was the public stairs everybody was complaining about, was maintained by the local government office. In research site 2 (Anamnagar), where I worked further with the children, we were able to conduct a cleaning campaign. These two interventions are at two levels. In the former one, children raised their voices regarding the improper infrastructure and in the later, they themselves were involved in the process of change. Hence this is a major part of the finding of this research – to know what type of intervention or involvement is possible by the children and how to gradually enhance their capabilities.

The issues identified by the children were in line with the research conducted by adults, especially the scholars in local and global contexts. Some of the issues raised by the children went beyond the conventional understanding of problems in open spaces. For example, they raised issues of discrimination in use of public grounds in their neighbourhood, one girl showed her room and chat box in mobile phone as her open space, as she believed that this is how most of the children in her neighbourhood spend their time - meeting friends and playing. While many children said that they need spaces to play, hang out with friends and so on, this little researcher said that she likes to spend time in nature, alone. Hence, open spaces are not only for socialising but to have some time for yourself too. The solutions proposed by LRs to decreasing open spaces in the city was to make use of the existing ones in a multipurpose way.

For example, school grounds when the schools are closed could be one of the neighbourhood open spaces as well as the private plots that are left empty by the owners could be opened up in the neighbourhood. This way the land could be used in a meaningful way and will also be looked after. The children were able to identify the actors for each situation of open spaces. Who are responsible for the problems, and who could take part in solving them? Sometimes, it was their (public) fault, sometimes the government was not taking care of the issues and often times, both were responsible. From this hint given by the children, I was able to analyse it in a manner on how the children could be involved in each case.

The result showed that children's role in open space planning can bring about a change in the society. Hence, the process can act as a catalyst for urban innovation as well as it would aid in the overall development of a child as a responsible individual. Being an action research, this study's main goal was also to develop a methodology on working with children so that it becomes an important framework for professionals working with children, not only in the field of urban/community planning, but in diverse fields.

8.1 Overall Methodology

The series of Study-Plan-Act as well as constant monitoring, evaluation and reflection though seemed like an overwhelming task at the start, a pattern was observed while generating the data from the whole process. In the literature review, it was clearly observed that a participatory approach of working with the children is essential for a change bringing notion. The case studies done for the same, showed the possibilities of working with children in different geographical context. The philosophical backdrop also supported the idea of involving the children in cocreating their environment – that a child is part of the environment and hence has a role in altering it, in the process, the child is also influenced. Thus, generating a two-way relationship of learning and growing.

Based upon the above-mentioned backdrops, Participatory Action Research (PAR) of Planning open spaces with and for the children was started. To start the research 'Study' phase was important. Hence, I had started my part of the process. The researcher (myself) had to be acquainted with the present scenario of the research site. Hence my own observation was also essential. Researcher's role was also to develop a base before starting the PAR – for example – choosing an effective neighbourhood where the proposed action research can be successfully conducted as well as where the necessary changes can be brought or is in dire need.

The 'Plan' phase was essential during this time as before going into action, there needed to be preparation for the same. The contact with the concerned bodies, building up of the relationship with research participants as well as their immediate counterparts were done. In this case, I considered building a close tie with the school authorities – principals and/or school coordinators. In this way, it was easier and safer option to get in touch with the children (in some of the prior studies local authorities and parents were contacted at the beginning).

For the 'Act' phase, the process of photovoice was started with the children. The working together with the children started with initial meetings and then with children taking the photographs of their neighbourhood with the theme 'open spaces'. The flexibility of the photovoice method gave a tremendous ground to carry forward the research as per the site situation. Though, initially 20 photos should have been taken by each Little Researcher (LR), due the availability of the mobile phones or limitation of the contexts, children took much fewer photographs as well as some worked in groups from the beginning. This was also important because children's participation was voluntary from the start, and it provided them their freedom to show what they really wanted to. Children's capability to observe their neighbourhood was seen – that no outsider could have observed. Examples of that was central green space – that outsider would see as a place for all to socialise and play, from the LRs' perspective, was the most discriminated space with unequal advantages of use. Another was an open private plot – seen from outsider's eyes would simply be another unused space locked up, LRs had a history with it, as previously it was an open space where they could play.

Representing issues with photos and words made an impact on the local people who had come to see the exhibition. They were engaged in dialogues; they were asking questions to the LRs as well as showing appreciation for such events. Photovoice turned out to be a very effective tool to working with the children. Though, primarily used for education activism, and other social issues, photovoice used with the children of age 11-16 helped them to identify core issues related to open spaces, critically reflect upon them as well as find solutions for the same. Working at the grassroot and with the vulnerable group was at the core of Participatory Action Research and photovoice was a tool effective for this purpose.

One interesting find was that, though this type of research, project or study had never been conducted in the research site, the perception of children regarding their environment was similar to the children of different research areas, in global context, as observed in the case studies. Along with this, the interventions proposed by them was also comparative to the case

study findings. Even the issues in the open spaces that the LRs mentioned and highlighted were similar to the findings of other researcher's regarding open spaces as well as design of such spaces. Nevertheless, the deeper layer observation by the children was context specific that could be only observed by the people, especially children living there.

8.2   Children's capability development, genuine participation and their environment

Series of communications and interactions on the topic during group discussions, design charettes, workshop and presentations and small group meetings encouraged children to critically reflect upon their ideas and capabilities. In the feedback session, they said that they learnt a lot and their understanding of the open spaces and its importance increased. I could not conclude if their capability to conduct such events by themselves to raise awareness has increased, but if there are any adult initiated programs as such and if they are invited to participate, they will definitely do it. They told this at the cleaning campaign event to the respective authorities too. Even during the photovoice process, they have shown that they can raise voice but to take action adults are needed as they do not have the resources to do it. Hence, as part of the adults and respective authorities, it is their duty to provide such platforms for children, not just for their development but also to make their community a better place.

Analysing children's data, it could be observed that they have categorised the issues according to the level of intervention needed and who are responsible according to them in solving those issues. The result of the analysis showed that children could – raise voice (this is taken as consultative participation), collaborate (collaborative participation) and take action (child led participation). At the beginning of the research, children were guided by me to carry on with the process. For the first action cycle, they depended upon me to arrange everything, yet they showed their competencies in certain parts. But when the second action was taken, children who were genuinely interested in participation were involved and their involvement and confidence increased than the first action. They gathered the volunteers by themselves, they started to clean without any instruction, even when it was time to speak to the authorities, they managed to do so without any prior notice. In the next action cycle, in the virtual online meeting, Little Researchers were more confident, and they shared their experience and knowledge gained to their peers who were present for the online session. Therefore, there was a gradual process of increase in their competencies as planners or researchers.

One of the major problems in the existing parks and open spaces was the restriction to use. For this, one of the LRs said that this is not a right thing to do - 'parks must be accessible to all, you

should not discriminate'. In a society where even adult voices go unheard, it is the duty of researchers and activists to bring forth the voices of the children, those vulnerable groups who can still raise their voices. Simple solutions like time management for different groups for using the open ground to play or for different activities would solve the problem of scarcity of spaces – solution proposed by LRs.

When, I talked about children, the ideas and the concept of integrating them in the decision making, the concerned authorities were not responsive. They could not think of children as active citizens. Even worse, they did not find it important to listen to the needs or ideas of the local residents at all. To build up a relationship with the ward officials and to make them listen to the children's voices, I had to make multiple visits to the office and explain each officer about its importance. Though not convinced at first, a continued interaction as well as processes helped to build up that relationship of trust and worth. A rigorous process of back-and-forth negotiations with the municipality officials, school representatives and community groups finally facilitated the process. One more thing that helped to build the relationship was the action taken that created a bigger impact. When the children and the authorities worked together to clean their neighbourhood, they built a sense of belonging and togetherness. Children after the campaign spoke freely to the authorities while authorities also promised to work further with these children by contacting the respective schools. Such methods were introduced to integrate children in the community affairs.

Hence, a methodology was created and successfully validated, which is a spiral of multiple actions cycles, one complementing the other and follow up of the previous action. Each cycle goes through steps of Study-Plan-Act with continuous Monitoring-Evaluation-Reflection. It demonstrated that the methodological approach for such process must be democratic, transdisciplinary, action oriented, critical and reflective, transformative, educational, flexible, adaptive and a continuous process.

8.3 Way Forward

Globally practiced in many cities, this approach of Participatory Action Research is relatively new in the research site. This study showed in what level are we standing as far as designing/planning or simply working with the children is concerned. Many large-scale projects by the government concentrate on building structure that may be benefitting economically but a city cannot grow and be a better place by economic enhancements alone. Also, the question comes, who are actually benefitting from these approaches, the immediate people involved in

the project or the locals? Government invests money to build huge structures and marks the projects as completed but no attention is given to the surrounding area and the immediate landscape. Footpaths, railings are constructed every fiscal year, but no priority can be seen for the soft landscapes. In the recent times, parks are constructed in various places but the public impact of these are very low. Boundary walls, use of a lot of concrete, inadequate designs and no public consultation make them uninviting thus failing the very concept of public spaces.

All these are critical urban issues. And children need to be aware about these with their age appropriateness. All the philosophical, theoretical backdrop of this research, case studies and contemporary literatures suggests that children need to be exposed to their environment with its good and bad. This is a learning process for them and a way towards developing into a responsible adult. The goal of the education is also the same, as discussed in Education for Sustainable Development – identifying problems at the grassroots and finding solutions also at the grassroots which can aid in sustainable development. And this research has provided substantial examples that the people, especially the vulnerable groups in the community are aware of the problems at the grassroot and they are the ones who can actually provide solutions for the same. This two-way relation of a child with his/her environment is an ever-learning process, which needs support at different levels – everyday settings as well as institutional. Children should be involved in meaningful projects with the adults which will help them develop their skills and be responsible and competent.

Striving upon these argumentations, children, in this research, voiced out for proper infrastructure and a lot of greenery, utilisation of unused open spaces, parks for the children and elderlies, no throwing of garbage in the streets, proper management of waste, reuse, recycle whenever possible. For all these, awareness is needed according to the children (Little Researchers). Hence, it can be observed that the children are able to see the bigger picture as compared to the authorities who are actually responsible to do these jobs. The finding of this research as well as it's input to bring about a change in the research site has been achieved. However, the most important part was the methodology of working with the children, a new model is developed. We need to test this model in several more sites and validate it as a new methodology of working with children. As the finding of the research is that Participatory Action Research is a cyclic process and moreover an action spiral that needs to be continued taking into consideration the previous action cycle, I set the floor for more research in this field using this methodology. Also, as this is a flexible and adaptive tool, expectations are such that alterations and improvements on the process are also welcomed, with justification.

9   Bibliography

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Annexe

A – Request letter to the schools at the start of first Action plan – Photovoice

MARTIN-LUTHER-UNIVERSITÄT
HALLE-WITTENBERG

Philosophische Fakultät III –
Erziehungswissenschaften

Institut für Schulpädagogik und
Grundschuldidaktik

Apekshya Dhungel

Franckeplatz 1, Haus 31
Martin-Luther-Universität Halle-Wittenberg, D-06110 Halle (Saale)

Ihre Zeichen	Ihr Schreiben	Unsere Zeichen	Datum
		dh	Kathmandu, 07.11.2019

Letter of Request

To,
The Principal
Nepal Mega School
Anamnagar, Kathmandu
Nepal

I would like to cordially request you to collaborate for my PhD data collection work conducted in the Institute for School Education and Primary Teaching of Martin-Luther-Universität Halle-Wittenberg, Germany.

The main task will involve students from your school to provide their perception and insights on the management and development of open spaces near their area, and act on those insights in collaboration with the local ward office. This research is conducted under the approval of Faculty of Philosophy III – Education of Martin-Luther-University Halle-Wittenberg. For further queries please feel free to contact me and I am looking forward to initiate this research project.

Sincerely,

Apekshya Dhungel

Postanschrift:
06110 Halle (Saale)

Hausanschrift
Franckeplatz 1
06110 Halle (Saale)

Mobil: ++49 1521 336-1551
Mobil: ++977 9841 327691

E-Mail:

apekshya.dhungel@student.uni-halle.de

B – Consent form for the students

काठमाडौँको खुल्ला ठाउँ सम्बन्धि यस अनुसन्धानकोलागि स्वैच्छिक सहभागीहरूको निजि विवरण
तथा तस्बिर संकलनको मंजुरिनामा ।

Consent to provide personal details of voluntary participants for this research
regarding open spaces in Kathmandu.

अनुसन्धानको बारेमा:

यो डक्टरेट डिग्रीको अनुसन्धान अपेक्षा ढुंगेल द्वारा जर्मनीको मार्टिन लुथर विश्वविद्यालय मार्फत सञ्चालन गरिएको हो। यस अनुसन्धानको मुख्य उद्देश्य कुलेश्वर आवास क्षेत्र र अनामनगर क्षेत्रको खाली ठाउँ (जस्तै: सरकारी जमिन, सडक बाटो वा कुनै पनि सार्वजनिक खुल्ला ठाउँ) को अवस्था बुझ्न, विद्यार्थीहरूको त्यस्ता ठाउँहरूको अवस्था प्रतिको धारणा बुझ्न र त्यस्ता ठाउँहरूलाई बालमैत्री बनाउन चाहिने सुधार सम्बन्धि सुझाव विद्यार्थीहरूबाटै विभिन्न बैज्ञानिक तरिकाले संकलन गरि प्रस्तुत गर्नु हो। यो उपलब्धि हासिलगर्नको निम्ति ३ चरणमा स्वइच्छाले सहभागी भएका विद्यार्थीहरूको बसाईंक्षेत्र वरिपरी रहेको खाली ठाउँ सम्बन्धि विवरण संकलन गरिनेछ। पहिलो चरणमा विद्यार्थीहरूले आफ्नो बसाईंक्षेत्र वरिपरी रहेको खुल्ला ठाउँ सम्बन्धि २० वटा तस्बिर खिची बुझाउनुपर्ने छ। दोस्रो चरणमा विद्यार्थीहरूलेनै २० बाट ३ महत्वपूर्ण तस्बिरहरू छानी त्यस तस्बिरहरूको विवरण पेश गर्नु पर्ने छ। अन्तिम चरणमा उपलब्ध भएका खुल्लाहरू ठाउँ मध्ये एक छानी विद्यार्थीहरूसँगै बसेर त्यस ठाउँलाई बालमैत्री बनाउन के-कस्तो परिवर्तन ल्याउन सकिन्छ सल्लाह सुझाव संकलन गरिने छ। अन्त्यमा यहि ३ चरणको अनुसन्धानात्मक खोजलाई समेटेर यस डक्टरेट डिग्रीको थेसिस तयार परिने छ। यस थेसिसले बालबालिकाको बालमैत्री शहर वा क्षेत्रमा बस्न पाउने अधिकार माथि आवाज उठाउने छ।

सबै विद्यार्थीहरुलाई अनुरोध: तस्बिर खिच्न प्रयोग गर्नु भएको उपकरणको सुरक्षा तथा हिफाजतको जिम्मेवारी आफैँ लिनु होला। धन्यवाद।

About the Research:

The research of this doctorate degree is conducted by Apekshya Dhungel through Martin Luther University, Germany. The main objectives of this research are to understand the situation of open spaces (government land, road/street or any public open area), understand the perception of students about the situation of these open spaces and to collect the ideas and knowledge of students about how to make these spaces child friendly in Kuleshwore Awas and Anamnagar area. To achieve these objectives data related to open spaces nearby the living area of voluntarily participating students will be collected in 3 different phases. In the first phase, the students will take 20 photographs about the open spaces nearby their living area. In the second phase, the students will select 3 most important photographs out of the 20 and will provide description about it. In the third phase, out of the available open spaces in the respective area one will be selected and a design workshop will be conducted with the students to collect their ideas and knowledge. Finally, based on the finding of these three phases the doctorate thesis will be prepared. This thesis will raise voice towards the right of every child to be able to live in a child friendly city or area.

Note to the students: The responsibility and safeguard of the device used while taking the photographs will be on your own. Thank you.

यो फारम भर्दा मैले पछाडी उल्लेखित विवरण पढी त्यहाँ लेखिएको विवरणहरु स्वीकार गरेको छु।

Before filling this form, I have read the details in the back of this page and by filling this form I agree to the details pointed out in the back of this page.

तपाईंको कुनै पनि निजि विवरण सार्वजनिक गरिने छैन।

No personal details will be made public.

___

नाम

Name
___
उमेर

Age
___
लिङ्ग

Gender
___
कक्षा

Class
___
विद्यालय

School
___
हालको ठेगाना

Current Address
___
तपाईं यस क्षेत्रमा कति समय देखि बसिरहनुभएको छ?

Since how long are you living in this area?
___
तपाईं विद्यालय कसरि आउनुहुन्छ?

How do you come to school?
___
पछिल्लो परीक्षाको GPA, Grade or Percentage

GPA, Grade or Percentage in last term examination
___
के तपाईं आफ्नो वरिपरिको खुल्ला ठाउँ प्रयोग गर्नुहुन्छ?

Do you use Open Spaces in your area?
___
यदि गर्नुहुन्छभने कस्तो किसिमको?

What kind of open spaces do you use in your area?
___
प्राय कतिचोटी प्रयोग गर्नुहुन्छ?

How often do you use these open spaces in your area?
___
के को लागि प्रयोग गर्नुहुन्छ?

For what purpose do you use such open spaces?

C – Consent form for the parents

Consent to provide voluntary participation for the research regarding open spaces in Kathmandu.

About the Research:

I, Apekshya Dhungel, am conducting this research for my doctorate degree through Martin Luther University, Germany. The main objectives of this research are to:

1. Understand the situation of open spaces (government land, road/street or any public open area);
2. Understand the perception of students/children about the situation of these open spaces; and
3. To collect the students' ideas and knowledge on how to make these spaces child friendly and act on it in collaboration with the local ward office, in Anamnagar area.

The first and second objectives are already achieved in our last meeting in Mangshir, 2075 (November, 2018). To meet the final research objective, I will have to work with your child, even after school hours or during the holidays. I would like to ask your permission for the same. I have received permission from your child's school to work on the project.

This research programme is also beneficial for your child in understanding the issues of society, open space, leadership skills, and management of your local area. For this purpose, I have to meet your child for three or four times. Based on these information and activities my doctorate thesis will be prepared. This thesis will raise voice towards the right of every child to be able to live in a child friendly city or area.

I give permission for my child to be part of this research project at his/her own will. Before filling this form, I have read the details above and by filling this form I agree to the details pointed out above.

No personal details of you or your child will be made public.

Name of Mother or Father

Name of your Child

Class

School

Current Address

Date and Signature

D – Detailed tables derived from onsite observation by the researcher

Baluwatar

Observation during different time periods of the day.

Time period	Activities
8:30-9:30	Children walking to school, teenagers walking on their own, also taking responsibility of younger siblings. Some children dropped off by parents on motorbikes, some in bicycles. Streets used for daily chores – bathing children. Proper footpath segregated by green bushes. Few benches along the footpath. No activity encountered in green spaces. Small junction/square is used as bus stop for children. Few people with religious activity in temple area. No separate parking areas noticed, bikes and cars parked along the street. No activity in sport ground.
11:30-12:30	Silent road with very few vehicular movement, comparatively empty street. No children and very less activity in the footpath. Some teenager boys were gathered in the green space, standing and chatting under the shade of trees. Gathering junctions, temple areas and sports field all empty.
14:30-15:30	More vehicular movement is observed. School buses and micro vans dropping off children. Teenagers walking and playing with ball on the street, riding bicycles. Children and adults having cold drinks and snack bought from the nearby shop in the junction space. In the sports field, boys are playing inside, no girls seen, but age group is mixed.
17:30-18:30	Kids cycling in the street and footpaths, light traffic. Adults are walking with children in the footpath. Children are playing in the small hill covered with grass. Elderly people are using the green area for resting and chatting. In the junction area, teenagers are resting and chatting after school. In the sports field, girls are playing basketball – training for sports.

Basantapur

Time period	Activities
8:30-9:30	A lot of market activities, goods buying and selling. Delivery vehicles dropping off goods to the shops. People seating and resting on the main square, old people gathering around. Locals fetching water from the stone spouts. School vans carrying children passing by. People and children playing around and giving food to the pigeons (this is a very famous square where there are always a lot of number of pigeons). Taking photos/selfies. Children running to school. Very small children are also not accompanied by parents but by their older siblings. Religious activities in the temples. Vehicles are parked in the square even with no parking signs. Construction materials and wastes alongside the road and pathways. Children playing with the tools left at the construction site.
11:30-12:30	Not much activity at this time. local vendors and few passers-by, not many children.
14:30-15:30	Not much activity at this time. local vendors and few passers-by, not many children.
17:30-18:30	In the main square, very vibrant, a lot of people and activities. Similar to the morning time.

Anamnagar

Time period	Acitivities
8:30-9:30	Children walking to school or to the bus stops with parents, both on footpath where possible and on the streets. Teenagers walking on their own. Some children dropped off by parents on motorbikes. Grocery shops on the ground floor, making the neighbourhood vibrant. Light traffic. Muddy road in most places. Green spaces exist as river and few unused lands – not much active. Bikes and cars are parked along the street.
11:30-12:30	Not much activities. Few kids playing cricket in the inner street.
14:30-15:30	Children returning home from school. Light traffic, mostly motorbikes. Children creating play in construction site. Jumping from one brick to other, sand and concrete. Playing in the puddle.
17:30-18:30	Streets in school area almost empty. Public badminton court dominated by boys. Children playing in private plot left opened and loosely barred. Children playing on construction site with materials like bricks, bamboos, gravel etc.

Kuleshwore

Time period	Activities
8:30-9:30	Children walking to school with parents. Teenagers walking on their own, also taking responsibility of younger siblings. Very few shops and local cafes on the ground floor, houses mostly compounded and gated. Light traffic, children crossing road on their own. Old people on morning walk. Few children playing games in the secondary roads. Mostly used by everyone, also bikes and motorbikes seen. Religious activities observed. Grandfather and grandson going to temple. No parking lot. Bikes and cars are parked along the street as well as in the areas segregated for greenery.
11:30-12:30	No remarkable/noticeable activity observed in the main streets. Few local vendors selling fruits and vegetables on their bicycles. Mostly parking in the areas segregated for greenery/parks – to be used as open spaces.
14:30-15:30	Children returning home from school from the main road. Light traffic mostly motorbikes. Activity with children, girls and boys from nearby schools playing and practicing volleyball, football, taekwondo, mixed age group in the sport ground. Few kids observing the activities from outside the ground.
17:30-18:30	Street in school area almost empty. Small boys and girls playing, cycling in the green areas – pockets of open spaces. Old people gathering for chatting and resting in one of the few maintained green areas. Teenager boys playing football, practicing sports in sports field. A lot of play and activities was observed. Religious activities observed.

E – SHOWED question/answers data arrangement and analysis process

Original text of one of the Little Researchers.

A lot of garbage is in the footpath. Garbage is in the middle of the footpath. People are not able to walk here and as a result they should walk from the main road which is very dangerous. Due to the lack of basic education and improper management of wastes. We can aware people and we can keep dustbins in the footpath.

We can see here a lot of garbage in the bank of the river thrown by the people. Open space is being used for the throwing the garbage. It produces a lot of new diseases and creates a lot of health issues. This problem exists due to improper waste management and lack of management skills. utilise the area for planting trees and greenery.

A wide open space which is used just for throwing garbage. People are using whole area for unwanted reason. This exists due to people carelessness and due to lack of proper management. We can protest about this problem and be together to make the surrounding clean and utilise it for good reasons. We could make a park for children or for the senior citizens.

Rearranged text of one of the Little Researchers of the SHOWED analysis.

Showed analysis data

Little Researchers	Situation	Action	Effect	Reason	Solution
	A lot of garbage is in the footpath.	Garbage is in the middle of the footpath.	People are not able to walk here and as a result they should walk from the main road which is very dangerous	Due to the lack of basic education and improper management of wastes.	We can aware people and we can keep dustbins in the footpath.
	We can see here a lot of garbage in the bank of the river thrown by the people.	Open space is being used for the throwing the garbage.	It produces a lot of new diseases and creates a lot of health issues.	This problem exists due to improper waste management and lack of management skills.	Instead of throwing waste we can utilise the area for planting trees and greenery.
	A wide open space which is used just for throwing garbage.	People are using whole area for unwanted reason.		This exists due to people carelessness and due to lack of proper management.	We can protest about this problem and be together to make the surrounding clean and utilise it for good reasons. We could make a park for children or for the senior citizens.

A lot of garbage in the footpath, bank of the river thrown by the people. – misuse of open space – carelessness of people
Improper waste management, lack of dustbin, lack of basic education.
Aware people and keep amenities.
Use open area for planting trees and greenery.
Protest and be together and clean and utilise open spaces, make parks for children and senior citizens.

Overall compressed SHOWED analysis of one school.

Situation	Action	Effect	Reason	Solution
Unmanaged plan hinder the construction work in footpath, poorly constructed public stairs, half erased zebra crossing, unconstructed road – poor infrastructure development 4 Garbage in open place Temples and playground, suitable garden has been destroyed by the people 2 Garbage thrown, waste materials – cigarette pieces, bottles, polythene bags etc. 5 Dry plants Pollution Beautiful greenery in the garden Unfair situation – everybody can play but not us	Equipment and materials left in an unmanaged way, lack of road maintenance 2 Misusing of open place by throwing wastes 2 Plantation is going on as we know these works are necessary and important for us. In that place people do religious work in the other hand they are misusing it by throwing like garbage, wastes and plastic bags in temple, not maintaining the temple 2 People throw garbage in the road, way to school 2, playground, temple, public area, open area, garden and bad smells comes from it. 7 It is not constructed properly and sustainably. Lack of amenities and safety concern by the government example zebra crossing Burning the waste materials pollution Take permission from the community to play in public playground	Poor infrastructure - Difficulty in walking because of marbles and pebbles, daily life disturbed, dangerous to walk and play, If we fall from the height of the stairs, it may cause death also, possibility of more accidents 4 (stairs, footpath, road) Chance of accidents of children and adults 3 May suffer from various diseases, make life full of diseases, dangerous to health – health issues, Diarrhoea, skin disease, eye disease etc. asthma 10 Children cant play there. 2 We cannot get fresh air and healthy life. When I came by that place my mind starts singing the beautiful song or poem. When I look at it my sad mood also become fresh. If we can play there, our health, mind becomes healthy, we can do entertainment Pollution and Bad smell 4	Lack of awareness and education. 10 Information about health related diseases, problems. Carelessness, irresponsible Uncivilised people, not following rules and regulations Lack of skill manpower, lack of knowledge about construction 2 Political instability - lack of management in our country, locality or area, carelessness of government, unfair situation 5 People don't think about their society. They only think about their home and they throw the waste of their houses outside of their homes, not civilised 2	Educated people should aware others about health problems of unmanaged and uncivilised lifestyle, as well as importance of games and sports for health 3 We can create awareness programmes, follow rules and regulations strictly 6 We can also create cleanliness program there. 4 Convince the people and manage, clean and care by ourselves all together with the help of our friends, family and other elder people. 3 Make the garden more beautiful by planting flowers, make amenities like chautura, playground, afforestation programs cleaning 5 Management issues - Complaint about this to the municipality, write letter to government to remind their duty, within the community (fair use of public space by time management, proper infrastructure development, management of waste 5

Overall issues in Open Spaces in all four schools derived from SHOWED analysis.

School 1	School 2	School 3	School 4
Homeless settlement Bad smell from river, water pollution 2 Road as a public space for activities, sunbathing, play space for children – cycling Road as play space for children – cycling, playing football 2 A well maintained place with greenery – beautiful to pass time Unmanaged cattle grazing and garbage in open space Boys playing football Hole in the road – poor infrastructure Tall buildings, narrow street Room- enclosed space Roof top garden Message box – virtual space where children spend time 2 Garbage in the footpath 2, bank of the river, open space 2, street (total 6)	Unmanaged plan hinders the construction work in footpath, poorly constructed public stairs, half erased zebra crossing, unconstructed road – poor infrastructure development 4 Garbage in open place Temples and playground, suitable garden has been destroyed by the people 2 Garbage thrown, waste materials – cigarette pieces, bottles, polythene bags etc. 5 Dry plants Pollution Beautiful greenery in the garden Unfair situation – everybody can play but not us	Beauty and greenery of open space, lots of trees are grown, a well-maintained park surrounded by greenery, greenery in open area around the temple. 4 Parking. Misuse of park. Children playing in the road/street. 3 A temple for religious activities. A paved land for everybody to play, place of greenery and trees, unutilised open space, street – disposal of waste, garbage dirty. 5 A clean and maintained area. A private plot with no grass. 2 Hens are grazing. Totally unutilised place, wide area locked from all the sides and un-necessary weeds and plants are grown naturally there. No parking area. Lack of greenery on the way to school. Construction site. People are enjoying in a hotel. Children playing in a private compound- gate closed. The children are playing in the school ground. It is the only ground in the locality where children can play without permission. Engaged in different activities in same place – old people are busy discussing, reading newspapers, children are sitting using mobile phones. A nursery – a place I would love to visit – probably everyone.	A lot of pollution and unconstructed roads. A lot of unplantation trees and a small unused lands. A lot of water pollution. A lot of garbage throwing near the temple. A lot of pollution and unconstructed roads. An open space where people can do exercise, play games etc. An open space where dust are thrown here and there. A lot of pollution. We see open area.

F – Examples of types of Open Spaces and Issues

All the types of Open Spaces mentioned by Little Researchers are shown here with the prevailing issues.

Types of Open Spaces	Issues of Open Spaces
Unutilised open space –	full of waste, open dumping, chance of prevalence of communicable diseases, spreading of bad odour, destruction of beauty
Park –	recreation centre for everybody, leisure time, beauty and greenery of open space, enhancing the beauty of the locality, good overall impact, refreshes the visitors.
Local bus parking –	noise pollution, even at night
Park –	misused
Road –	children playing football on the road, compelled, risky
Temple –	for religious purpose, empty, though refreshing
Open space –	unutilised
Open space –	disposing of waste materials, reduces place for children to play
Road –	children are playing, dangerous – vehicles come and accidents
Open space –	with lot of greenery and trees, also a plastic bag full of waste is thrown – degrading the quality of the environment, health of the people
Unutilised open space –	waste, garbage thrown, place is dirty, children can't utilise, not preferred by the people of the locality to use for other purposes
Open space –	a clean and maintained area, well utilised by people and maintained too, children are playing, even for parking and other activities, two little boys are playing with each other.
A private plot –	no grass/greenery, cattle grazing. People leave their cattle there; space can't be used by locals
Street –	children playing, forced to play in busy street, very dangerous
Private plot –	totally utilised, locked from all sides, weeds and plants are growing, no one can use it. pathetic condition, harmful insects can come into our house.
Road –	used for parking blocking the traffic movement. In case of emergency, ambulance and other vehicles cannot enter the locality and it makes the place narrower.
Street –	throwing garbage. Polluted and stinking, environmental degradation, air and land pollution.
Road –	daily commute, there is lack of greenery, polluted and dirty, local people throw all waste there. No space for passersby to walk. Unhealthy
Open space around temple –	a lot of greenery, people put effort to make a pleasant place, passersby feel relaxed and develop positive impact in their lives. Whenever we come here, we feel relaxed.
Private plot –	over polluted from unwanted things that people throw. Youngsters are playing in such polluted area, muddy, dirty, children forced to play – unpleasant environment.

Construction site –	used as a playground before, now as a parking lot, in the future, a party hall will be made. We are stopped to play, less chance to play outdoors, stuck indoors- no mental refreshment.
Hotel –	people are enjoying here, come here for physical refreshment, tea, food and enjoying.
Private plot –	gate is closed from outside, kids are playing, some locals and owner made gate and only few people can go inside and use this space. All free grounds are not letting us play. So, we play indoor games and be online to get mental refreshment.
School ground –	children are playing, only place children can play without permission. But very less children are there. Most of them are limited to video games.
Small open space –	a table, elderlies are sitting on one side, chatting and reading newspapers. Children are sitting on the other side using mobile phones. No adults are seen in such spaces. Need more places like these so everybody can use it.
Park –	well maintained and surrounded by greenery. Only few people sitting there. To blame the government is easy but people are not using the spaces even when its available.
Nursery –	a place I would love to visit, probably everybody. Properly utilised open space with greenery and beautiful scenes. Everyone – children, adults, old people love to spend their time. all of our headaches, tensions and irritations fly away when we relax in such places.
Footpath –	construction work going on in unmanaged way, all the things left, difficulty in walking, children and people can get injured.
That place – open place –	people throw garbage, not properly utilised, misusing, making polluted and inviting diseases which may take their lives.
Temples –	need to do religious work but misusing by throwing waste, plastic bags, various diseases are spread, may suffer from diseases.
That place – way to school –	garbage thrown, bad smell comes, it makes our health full of diseases.
That place - playground –	many garbage thrown, makes our health full of diseases and many people are infected.
That place –	dry plants, cannot get fresh air and healthy life.
Public space –	usually we see garbage, pieces of cigarettes, beer bottles, polythene bags etc. dangerous for health. Contaminates various types of diseases - Diarrhoea, skin disease, eye disease etc.
Unmanaged stairs –	not constructed properly and sustainable, very dangerous for children and elders many walk through this stair when they go to school. If we fall from the height of the stairs, it may cause death too.
Half existing zebra crossing –	can't see it properly. People will cross the road carelessly and there is more possibility of accidents which may cause death also.
Garden –	there is pollution. Suitable garden has been destroyed. Carelessly burning the waste from their homes- polluted day by day. The person suffering from asthma will have many problems and pollution may affect to everyone. The children of that locality cannot play there.

Open space –	many garbage – unwanted waste and garbage thrown- harmful for our health.
Garden – with beautiful greenery -	When I came by that place my mind starts singing the beautiful song or poem. When I look at it my sad mood also become fresh.
Central green field	– All people play there but we cannot play there. We have to take permission from the community to play there. If we can play there, our health, mind becomes healthy, we can do entertainment.
That place –	many garbage thrown – bad smell, makes our health full of diseases.
Public space- temple –	many people throwing garbage. People are not maintaining the temple. Because of throwing garbage in public space, it can cause many disease to the people. From the bad smell of the garbage we cant walk properly.
Unconstructed road -	People are destroying the road but they did not repair that road in proper time. By destroying the road, it is quite difficult for us to walk comfortable. It also may cause accidents.
Riverbank –	settlement of homeless
River –	mixed with drainage water, polluted – waterborne disease like diarrhoea, dysentery etc.
Park –	affected by smell of river, misuse and careless disposal of waste, environmental pollution increasing, children cannot enjoy the park.
Road –	people are staying to keep them warm by the heat of sun, talking to each other.
Road –	kids riding bicycle, enjoying as they need to play games etc.
Park –	greenery and very beautiful and great place to time pass, fresh air blowing- play and sit.
private plot –	people leave their cattle grazing in the garbage- dirty place as they excrete there.
Open space –	boys playing football – good exercise.
Road –	hole in the road – poor infrastructure, risk of accidents – political illness.
Footpath –	a lot of garbage, people not able to walk, obstruction, may cause accidents.
Riverbank –	a lot of garbage, open space mostly used for throwing garbage, produces lot of new disease and health issues.
A wide-open space –	used only for throwing garbage, whole area for unwanted waste.
Road –	people playing football on the road- risk of accidents, but people are ignoring it. people need refreshment and physical health.
Narrow street –	people are sitting obstructing other passersby.
Street –	Garbage.
Riverbank –	a lot of garbage and plastics around river. Area is full of dirt and the pollution is increasing. Crowded place, but very bad smell.
Open area –	waste and garbage, useless materials, even materials that can be recycled are thrown away. Harm us socially and physically, people can't live around such places. Degrades natural beauty.
Footpath –	polluted – garbage, food wrappers. People not able to walk due to pollution. It stinks and spreads diseases.

Unique Types of Open Spaces	Issues of Open Spaces
Narrow alleys and tall buildings –	dangerous in different situations, taken all open spaces.
A room –	spend most of the time, no open spaces nearby.
A rooftop garden –	flowers are planted, substitute for green areas in open spaces.
A status box of Facebook page	– where we spend our most time, no place to hang out, no parks.
A convo box –	where we spend hours messaging, can't meet and make conversations.

Compressed Open Spaces all Schools.

Open spaces

Avantegarde
- Unconstructed road
- Unused land
- Water
- Temple
- Unconstructed road
- An open space
- Open space
- Open area

New horizon
- Unconstructed path
- Open place
- Temples
- *Playgrounds*
- Temples
- *Playgrounds*
- That place
- That place
- That place
- *Public place or area*
- Unmanaged stairs
- Zebra crossing – street
- *Garden*
- Open spaces
- *Garden*
- *Public playground*
- That place
- *Public space*
- Unconstructed road

Nepal Mega school
- Homeless settlement area – bishnumati river
- *UN park – next to bishnumati river*
- Road – as public space
- Road – for kids
- *Greenery and beautiful place to time pass*
- That place
- Open space
- Road
- *Scenery of tall buildings*
- *A room*
- **Rooftop garden**
- *Status box on facebook page*
- *A convo box*
- Footpath
- Bank of the river
- Wide open space
- Road
- Narrow street
- Street

Occidental public school
- **Open dumping**
- ***Beauty and greenery of open space – madan bhandari memorial park***
- **Parking**
- Flattened open space – probable construction site
- *Park*
- Road
- Temple
- Paved open space
- Road
- Open space filled with greenery and lots of trees
- Unutilised open space
- ***A clean and maintained area – open space***
- **A private plot – no grass**
- Street
- Totally unutilised place – wide fenced area – private
- A space marked with 'no parking'
- Street
- On the way to the school
- Open spaces around temple
- **A private plot**
- Ground with construction work
- *Hotel*
- A gated open space for some
- *School ground*
- *A table*
- *Park*
- Nursery

G - Categorised Issues in the Open Spaces

Social/Cultural	Health	Environment	Political/economic
Lack of responsibility, self-centred people 2	No relaxing places	No other suitable paster land for cattle to graze	Lack of awareness
People are selfish and busy in their own work. They do not care about the community but just think of own self, carelessness	Importance of open spaces in their lives	No one putting effort to eradicate pollution	Lack of good plans and policy by concerned bodies
Park is dedicated to a legendary leader	Insufficient space for children to play	Add greenery there	Park is dedicated to a legendary leader
Improper utilisation of available spaces	Not aware of sanitation and preservation of the space	Not taking care of own land	Carelessness of local bodies
Business of the people and lack of proper attention	Responsibility for cleanliness	There is dust and when we play the locals scold because dust from the ground goes inside there house	No proper management for waste disposal in the society.
Not aware about importance of open spaces	No open space they can utilise for playing	Improper utilisation of available spaces	Locked for other people to be used
No open space they can utilise for playing	Add greenery there		No open space they can utilise for playing
The owner doesn't care about the land and the land is simply lying.	There is dust and when we play the locals scold because dust from the ground goes inside there house		The owner doesn't care about the land and the land is simply lying.
Not realising the effect of the problem in the society	We can enjoy there and get refresh through discussing and talking about each other and take street foods.		There is no ground to play, we go and eat there
Totally uncivilised people. There are some people in the society who are irresponsible towards the society 2	To get physical refresh we visit hotel with friends and brother and sister and eat, talk and enjoy.		Kathmandu is a metropolitan city which is densely populated and there is lack of open spaces
Positive impact of the people to utilise the place	No one is utilizing it in an efficient manner, even there is a beautiful park managed.		
The owner of the land has not stopped other to stop throwing waste			
People near of the ground say that when we play there the house will vibrate and may fall due to the earthquake happened in 2072.			
There is no ground to play, we go and eat there			

We can enjoy there and get refresh through discussing and talking about each other and take street foods. We don't see adults' group there which means that the adults or middle-aged people are not interested with such stuffs. even there is a beautiful park managed.				

Compressed and new category emerged.

Political/ economic/infrastructure	Environment	Health and safety	Social/cultural	Overall beauty
Homeless settlement Garbage disposal of waste Hole in the road Risk of accidents could be recycled are thrown not able to walk, obstruction may cause accidents narrow alleys and tall buildings	River water mixed with drainage, garbage, garbage smell of river garbage and plastic around river crowded place, but very bad smell smell of river environment pollution increasing daily greenery and very beautiful fresh air blowing waste and garbage could be recycled are thrown lot of garbage pollution polluted cattle grazing in the garbage and excreting	Waterborne diseases New disease and health issues Children cannot enjoy Fresh air blowing People are staying to keep warm Kids riding bike Playing football Physical health health harm us socially and physically may cause accidents stinks and spreads diseases narrow alleys and tall buildings	Garbage Misuse and careless crowded place, but very bad smell children cannot enjoy play and sit talking to each other kids riding bike children enjoying games playing football people ignoring need refreshment sitting obstructing passersby playing football waste and garbage could be recycled are thrown harm us socially and physically cattle grazing in the garbage and excreting	Garbage Greenery and very beautiful Degrades natural beauty cattle grazing in the garbage and excreting

H – Table showing who are responsible for issues in the Open Spaces

Local people and the government	Local people	Government
Playing football on the road as there is no football ground to play nearby. People are sitting in narrow street and blocking the way for pedestrians. Garbage thrown on the way to the school which causes bad smell and health full of disease. Garbage in the playground which makes health full of diseases. Many dry plants so we cannot get fresh air and healthy life. Garbage, waste materials such as pieces of cigarettes, beer bottles, polyethene bags etc. Suitable garden has been destroyed and there is pollution with burning of waste. *Beautiful greenery in the garden.*	Throwing garbage in an open place. Not utilising open space properly and misusing it. Polluted place which invites diseases which may take our lives. Not thinking about the society and only thinking about the home, throwing waste outside the house. Throwing garbage on the street. People throw waste of their houses in public area. Garbage in the open space. Garbage thrown in the open area. Unconstructed road/ destroy the road and do not repair in time.	Construction work ongoing, all the things are left there in an unmanaged way. Lack of awareness and education. Lack of skill manpower and political instability. Lack of management in our country and locality. Unmanaged stairs/public steps / dangerous for elders and children. Half existing zebra crossing. A public playground where everybody is not allowed to play. Many people throwing garbage in the public space / temple area.
Unplanned garbage use. A lot of garbage throwing near the temple – our national heritage are affected. Devotees are not able to come for worship. A lot of pollution and unconstructed road. An open space with scope of being a play area and a place to exercise not managed properly, waste materials are thrown. An open space where dust are thrown here and there. Manage waste and aware people to utilise open space and be healthy. Aware the government for proper disposal of solid and liquid waste. A lot of pollution which harms our health. A lot of garbage throwing near the temple – our national heritage are affected. Devotees are not able to come for worship.	people are using this area as their wish. A lot of pollution. A lot of unplantation and unused land. A lot of water pollution by using for bathing, washing clothes. People are not managing the place. No proper utilisation of dustbin and garbage. Misuse of public open space by putting private property and construction tools.	Lack of strict rule and regulations No proper use of water resources and sanitation. Unconstructed roads. Government is not responsible. People area facing problem – children cannot play old people cannot gather for gossip. Bad smell, water, soil. And air pollution. No pollution free environment.

I – Solution of one school – compressed

Numbers in the second column represent number of repetitions of the solutions provided by the Little Researchers.

Overall text from SHOWED table for Solutions	Compressed text
It is most needed for the proper settlement of those people by the government. We can make parks for people to stay and talk, keep them warm. We can construct the alleys to help the people ride bicycle and remain healthy. We can encourage people to come to park rather seeing tv. We can find the owner to clean and the other garbage in that place we must keep dustbin. We can use open area to play and make more open area to play. Not making narrow areas by making houses. Utilise open space. Planting should be done in open areas. People should play rather than using Facebook. People should make parks. We can aware people and we can keep dustbins in the footpath. Instead of throwing waste we can utilise the area for planting trees and greenery. We can protest about this problem and be together to make the surrounding clean and utilise it for good reasons. We could make a park for children or for the senior citizens. Our government and local people should think about making playgrounds. Government and local people would think about making parks. There should be public spaces just for dumping the garbage which can be later recycled. We can have proper waste management and cleanliness near the water resources. We can plant trees around the riverbanks. Such open spaces should be used in an appropriate way. We can counsel the people about proper use of open spaces. We can have awareness programs to the people in order to make them well known about open spaces. We can aware people. We can make clean roads. We can make proper waste management. We can develop the construction field.	Proper settlement of squatter settlement by the government Think about and make parks for people to stay and talk and sunbath, children and senior citizens (government and local people) 4+2 Construct bicycle alleys and remain healthy Encourage people to come to park ,play 2 Make responsible, counsel people about proper use of open space 2 Amenities – dustbins in open area, footpath 2 Use open area to play and make more open area 6 Proper infrastructure development with planning – no narrow alleys, bike lanes 2 Planting, greenery in open area, river banks 3 No throwing waste in open area Special area for dumping garbage, Management of waste – recycling 3 Awareness (programs) to know about open spaces and use 3 Protest and make surrounding clean and use for good reasons 3

J - Feedback form for students

Feedback form for students – regarding the photo exhibition and design workshop carried by students.

Name: Age: class: Contact information – email id: School: Home address:	If you want to add more texts, you can add more papers by yourself. Your opinions matter a lot as you are part of this research and your point of views and findings are as important as mine. ☺

1. Do you know about child rights?

2. Do you think your role is important to influence your community?

3. Should children be involved in community issues?

4. What do you think is the best and worst thing in your neighbourhood? Why?

5. How was the experience of taking the photos? Did you observe something new in your area? Did you notice new things, or you addressed the existing issues?

6. Do you think your knowledge regarding the open spaces and their importance has increased after this process? How?

7. Did you benefit from sharing your ideas and discussing about different issues with your friends?

8. Are you satisfied with the result obtained from the workshop and exhibition?

9. Should there be more programs like this for young people to get involved in the community issues? Or should there be a different approach altogether? What do you think?

10. Given an opportunity, do you think you will be able to plan and manage open spaces in your area? What will be your approach?

11. Are you interested in getting involved in this project further?

K – Proposal to the municipality for further work discussion

<u>Planning open spaces with and for the children</u>

Proposal for managing open spaces

<u>About the Research:</u>

I, Apekshya Dhungel, am conducting this research for my doctorate degree through Martin Luther University, Germany. The main objectives of this research are to:

1. Understand the situation of open spaces (government land, road/street or any public open area);
2. Understand the perception of students/children about the situation of these open spaces; and
3. To collect the students' ideas and knowledge on how to manage and maintain these spaces in collaboration with the local ward office, in Anamnagar area.

<u>Work completed:</u>

The first and second objectives are already achieved in our last meeting in Mangshir, 2075 (November, 2018). Through sessions of group discussions as well as photographs and texts written by children regarding the open spaces around them (in their locality), following proposals are drawn together with the children to maintain and enhance the situation of open spaces.

The solutions provided by the children are categorised. This categorisation helped to identify which of the problems could be solved by the children and in which problems, they could raise their voices for action by authorities and the adults of the community.

Raise voice	Consultation	Take action
Think about and make parks for people to stay, talk and sunbath, children and senior citizens (government and local people). Take responsibility for the conservation and maintenance of all open spaces – community parks, temple areas etc. Make playgrounds.	Encourage people to come to park and play Make responsible, counsel people about proper use of open space No throwing of waste in open area Protest and make surrounding clean and use for good reasons	Planting, greenery in open area, riverbanks Awareness programs for cleanliness, greenery Awareness (programs) to know about open spaces and use Motivate adults also take care of issues – they should take responsibility

Proper infrastructure development with planning – no narrow alleys, bike lanes. Provide basic amenities – dustbins in open area, footpath. Make pollution free environment. Maintain greenery. Set rules and regulations - not parking in the no parking area, not throwing garbage in the open area etc. Management of squatter settlement by the government. Special area for dumping garbage.	Clean and maintain, preserve and utilise open area. Proper disposal and management of waste – recycling. Work together, consultations and mutual understanding among the stakeholders. Request to make the school ground available for everybody during holidays. Private plots should be requested to be available for the local people when not in use by the owner.	and work on maintaining open spaces. Cleaning campaign in the local area to make the surrounding better.

For the 'Consultation' part, children are interested in making people aware of the importance of open spaces and their maintenance and also the importance of living in the clean and healthy environment. For the 'Take action' part, children are enthusiast to work together with concerned authorities to make the environment better.

Further work: can come under discussion

To meet the final research objective, children will have to work with the local ward office. After discussion with the authorities and stakeholders, a feasible action plan will be formulated and will be worked on in close collaboration with the ward office and concerned authorities.

This project showed that the children are able to comprehend the importance of open spaces. They are able to appreciate the available maintained open spaces like community parks and temple premises. The children involved in the project will have a better understanding of the issues of society, open space, leadership skills, and management of the local area. It is also beneficial for the local people as it will help to create awareness about their environment. It thrives to raise voice towards the right of every child to be able to live in a child friendly city or area.

L – Photovoice photos and stories presented in exhibition

fig:- Polluted River

It is seen that rivers is polluted and sticky. People are throwing garbage and that waste material in the river. Due to this, People are suffering from various type of diseases. This people are polluting the river by themselves and complaining to local bodies about this river. According to the data, this river have one of the highest concentration of E-coli Bacteria. Which is very harmful for the environment.

fig:- Polluted environment.

It is seen that a proper open space has being a place of throwing garbage. Where People are throwing garbage here and there. They are not being conscious about the People's health that will affect the health of People. Will get affected by

Construction has not been done which also may take the life of people. There is a lots of dust which affect the people.

" "
This place is the area where every one loves to come. It often relaxes all the people. Being an intellectual person, we all should try to make our locality as above. It is often a pride to have such a good place which can make us feel good. "

Beat Pollution, Save Lives

If you can't be the one to stop pollution, don't be the one to continue it.

It's actually a shameful thing, we call ourselves intellectual and live in a environment where even animals don't prefer to live. also

Fig:- Parking of NO PARKING ZONE

In the above figure you can see that the two wheelers vehicles are parked at No Parking Zone. This place is regularly filled with vehicles everytime.

Many efforts like posting WARNING messages and other efforts have been made but we are still unable to solve this problem. This single problem has created many other problems in my society.

Due to this uncivilized parking four wheeled vehicles are unable to get it. This has already made the road too congested. Although traffic police move around those area none of the useful active actions are taken. As in the figure many other posters are also posted which clearly shows "Parking

Every body wants comfort. so why don't we work for our comfort? The above picture illustrates a park where we can relax and be away from today's sophisticated and virtual world. Instead of polluting our environment and being imprisoned with a hand-cuff let's just go green. Instead of being limited within a room and technology let's just we be free with the

Fig:- Park with good environment.

Life is all about entertainment, hard work, co-operation and many others. From these factors this park helps in our internal peace, entertainment and also time pass. Rather than playing mobile 4 hours and watching T.V we can get fresh oxygen in our park. It also makes our eyes better. So, park like this must be made everywhere in the city.
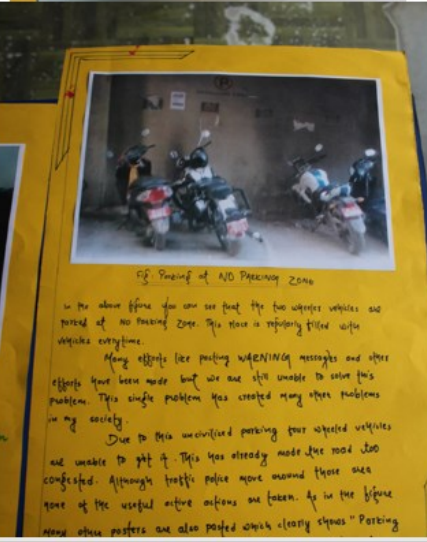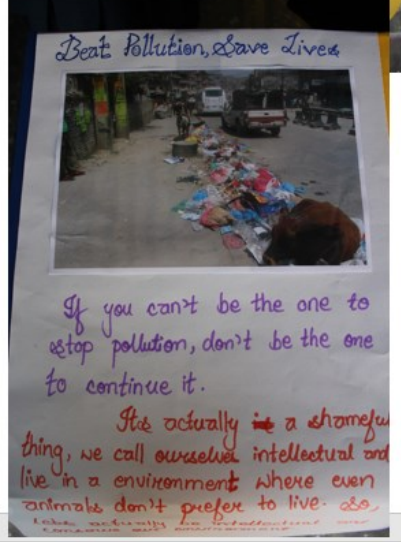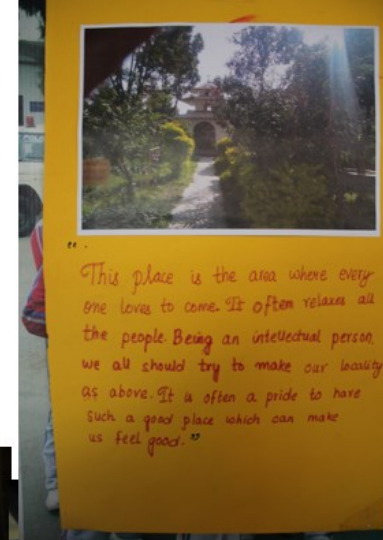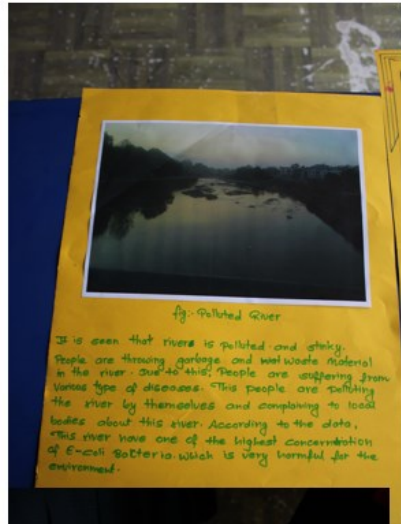
Fig:- cattles grazing at the bank of river full of garbages.

So, in this figure some cattles are searching for their food to live in garbage. Even though the river is dirty even bank of river, their owners are leaving them to graze there which leads to even increase in the garbage and and that will pollute the environment. We must clean the garbage also make the river clean so that people will vegrate that why I threw garbage to clean river.

Fig: Rooftop Garden

Rooftop garden is the most common garden in our area. We do it because we like flowers, greenary. But most importantly is done due to lack of enough land or area in our house.

Fig: Children playing on the public ground

In the above figure we can see children playing on the ground the playing ground is still not safe for the childrens to play. There are many hurdles on the playing spaces like bricks, stones etc. children can hurt themselves while playing and it can be really dangerous too this problem is persisting as there is no proper management of open spaces. As the city lacks open spaces so children to play still the few space available are also not properly managed. So have to implement some plans and policies to make this ground safe and better.

"Change Is possible"

Fig: People playing football in road

In this picture we can see some boys are playing football in the middle of the road near tinamnagar. This is due to lack of play ground and futsal in the area. We all know that games and sports are necessary for all the growing children. There must be open space such as play grounds available for everyone in order to stay fit and healthy!

PICTURE SPEAKS THE WORDS ITSELF

So, what can we expect from the local bodies if a place full of greenary few years back today has turned out to be a parking space for the offices???

The above place that we see in the picture represents the playground about if you back from today. This picture has turned out to be a parking spot today. If this place is converted, children will no longer need to play in the roads as they will have one with them.

Fig: Our Crowded City

Due to urbanization, most of the free land have turned into private property to build houses or buildings. Every year many people outside the valley migrate to city so, with the increasing number of population, open areas are decreasing and our city is turning into a suffocating place.

fig: Unmanaged park

It is seen that it is a Park which is not managed Properly. Garbage are thrown here and there which is near to Polluted river due to which this, it creates Problem to those People who come here.

Pollution Management is impossible unless we carry out our responsibility of cleaning our own environment.

This shows the use of open space for playing.

⇒ This shows a positive aspect as children's can enjoy playing when such open spaces are used for playing as playground.

⇒ Developing such space as playground can help the children engage for playing and for recreation.

Fig: OPEN SPACE

I think Open Space are not been used properly. All Children are using Only Social medias. Due to the lack of proper road it is difficult to play here.

Fig: People taking sun bath

Fig: Garbage on open space

The picture given to is of an open space near the 'putalisadak' area. Here, we can see an area surrounded with trees being polluted with garbages as well as reusable materials. We can see how people are degrading the natural quality of the environment. This is because of lack of waste management. We must have knowledge about need or cleanliness. There must be proper waste management.

Clean environment,
Clean earth!

If we believe, we can !!!

Today, even we have to think thrice before we breathe, co'z we don't know what harmful dust particles and chemicals are there in the air. We have got one world and one life, so lets spent it conserving our world. lets go green and save our environment and open spaces.

Fig: Room, our usual place

Our room is the place where we spent most of our time, either playing or surfing internet. It has become our daily life style to not go out of our room because there are no parks or play ground for us young people to hangout and more importantly pollution outside.

Change Starts from you let it now......

Fig: Garbage on footpath

This shows the open space used for parking.

⇒ When open space are used for random parking, then it has disadvantages. It might increase the noise pollution

⇒ Rather than using open space for parking if they are managed properly and made suitable for playing for children and developed as a small park, then it will being many advantages.

If only earth survive, then we can survive too.

Water Pollution

Let's make earth a better place to live.

"If you wanna stay fit, have a bit of play everyday"

The above picture illustrates the pictures of some of the kids spending their time (leisure) playing and relaxing with each other. Children are frustrated whole day reading and playing with IT-based tools.

Physical activities are very essential for the growth and development of the kids. For such activities, we require open spaces. So,

"Let's Conserve Open Space"

We live in a country, where there exists religious tolerance. Being a Nepali we must be proud that we got such a beautiful fortune to be born in a country which is known for its unique religion and culture. So, lets preserve and promote our religious places which are the great source of facility which is also a kind of open space where we can relax and be stressed for sometime.

Unused and unmanaged open space.

We see here half existence zebra crossing. We even can't see it properly. The zebra-cross lines are half rubbed.

We should convince the government to manage these zebra-cross.

Half-Existence Zebra Crossing.

fig: Soil Pollution

We can see that garbage is thrown on ground...

We see here unmanaged stairs. It is not constructed properly and sustainably. It is very dangerous for children's as well as elders because many citizen's walk through little stairs when they go to school or to play.

"PEACE IS MORE ESSENTIAL FOR GOOD HEALTH RATHER THAN WHEALTH AND COMFORT"

Everybody in the community or even in any workplace...

"So, Let's work to Conserve such places."

Street is also an open space. This waste will create hazard in our environment.

Unused and Unmanaged Open space

We can see here pollution. The person who is suffering from asthma will have many problems, and the pollution may effect to every peoples. People are carelessly burning the waste materials of their houses in a suitable garden which makes it polluted day by day. This is related to our lives because we have already said that the people who were suffering from asthma will have many problems and the victims of over society can't play their because the suitable garden has been destroyed by the peoples of that area.

Lack of infrastructure and safety in night to walk.

Green Space we cannot use.

Photo by: NHSS

This temple is property managed. We need more places like this. So, we should maintain our public properties in a good way. If we maintain these temples, we can preserve and promote our culture, tradition, religion etc. Nepal is also known as the country of temples.

In this photo, we can see a lots of land pollution. We haven't noticed too much but we really think that there is not a pollution free environment. This is related to our lives by the air and land pollution which can create a many harmful diseases and can also cause a air as well as land pollution. This problem is exist because of people are not utilizing dustbin and garbage. This is also caused due to the lack of sanitation awareness among the people of society and carelessness of local people. In order to remove this problem, society head can make a rules and regulations about pollution. We can remove it by recycling the plastic bags, utilizing dustbin and maintaining sanitation as well.

In this photo or picture I see a lots of water pollution. People of this area are using water for their own purpose like bathing, washing clothes, which harms in people health. Due to the effect of bad smell, people are not able to take breadthe and live properly. There is no proper use of water resources. We have to together for cleaning and to use properly. We have to maintain sanitation around this area.

In this picture I see here a lots of garbage throwing near the temple. Due to the garbage, our national heritage are effected. Due to this problem, the devotees are not able to come temple for worship. Due to lack of strict rules and regulations, people are using this area as their wish. We can formulate a strict rules and regulations and cannot awareness program against this problem. We have to together to for cleaning the temple.

Poster 1 (top left):

This is the place where people sell fruits. But we can see this place is very untidy. People are throwing garbage in waste water canal which cause the blockage which make difficult for people to walk. By throwing garbage in such place many disease can be spread. To solve such problem we should create awareness program.
-NHBS

Poster 2 (top, second):

In this photo we can see a land pollution and also unconstructed open area. This a serious problem for people of this area because it may cause different disease. It is effecting the natural beauty of this area and also decreasing the valuer of this place.
This problem is existing due to the careless ___ of local people. For the proper utilization of this place awareness progamma between people should be conducted. They should have a proper knowledge about the importance of neat and clean environment.

Poster 3 (top, third):

Photo by NHBS

This Play ground is for all of us. But we can't play here.

Poster 4 (top right):

We all can see ___ this photo is related to unconstructed of open area. This is a public place where people can do physical exercise, games etc. but people used to put their private property like vehicles, construction tools etc. If there were enough spaces then children can enjoy here. These serious problem is exist because of the people who used to put private properties in this place and also ___ due to the lack of awareness programme. We can managed this problems by making ___ rules and regulation and by conducting various awareness programmes as well.

Poster 5 (bottom left):

In above given picture, we can see three distinct types of pollution i.e. air, water and land pollution. Not only the environment is being polluted but the human health is also being worse. Due to the nature of various impure substances in the air, water and land this is unsafe open space.

Poster 6 (bottom, second):

In this photo we can see open space used. It is a public property but still people use to put their own private property like vehicles/construction tools etc. If there were enough spaces then childrens could play here and old aged people could do physical exercises. This problem exist because people who used to put their property to this open space placed as well as our lack of public awareness program.
We can conduct public awareness programs, making strict rules or regulations etc. We should create public places like public park, play ground etc.

Poster 7 (bottom, third):

Firstly, we see here open places with many garbages, unwanted wastes are thrown in this open area. It relates to our lives because:- It is harmful to our health. If people won't throw the waste materials in this open area we can make a safe playground or a beautiful garden for playing or relaxing. Due to the unutilized people of the locality. This problem exist. we can convince the people of that locality or we can manage it with the help of our friends, family and other's public people.
Thank U!
-NHBS

Poster 8 (bottom right):

Temple to prevent waste pollution but no one worships.

M – Photovoice group discussion transcribed example

(few at the front nodding in agreement, at the back no reaction) yes, no gesture #00:03:36-5#

R – when you say people, it means us or? #00:03:38-8#

(again few agreement with smiles) #00:03:42-3#

R – you may sit #00:03:43-3#

(everybody is curiously looking at the laptop screen to see the next photo) #00:03:47-5#

R – who took this photo? #00:03:48-0#

c   raises   her   hand
R – this is you too? The same thing here also, garbage is thrown in the river #00:03:54-1#

(talk   and   murmur   with   each   other,   no   specific   voices   heard)
two boys at the front, b and his friend recognise the photo as theirs #00:04:05-1#

R – this one? What are you trying to show? #00:04:07-5#
both of the boys discuss and stand up, b starts to speak
b - actually, thats the area which was previously used for playing but
friend   -   it   was   like   a   park
b - ya it was like a park. but it was a personal #00:04:23-2#

R - private plot #00:04:23-0#

b - private private plot. and the later on that the owner of the plot did not allow us to play there. and it became like a open dumping site and it is remaining like that and people just come over there, throw their wastes from their home. and the condition is like that what you see. #00:04:42-7# (*all spoken in English*)

R – if you guys are comfortable speaking in nepali, please do so ok. If you want to say everything, ok. This is not a proper speech, if you are comfortable in expressing your feeling in nepali, you can use both the language ok. #00:04:57-7#

R – this is also the similar right. (pause) garbage in the street. #00:05:03-8#

F2   –   sit,   sit
R   –   sit,   sit
(b and b´s friends sit) #00:05:06-9#

R – who took this one? #00:05:14-9#

(d at the back row raises his hand) #00:05:15-7#
(stands up and starts speaking) #00:05:18-3#

N - Presentation transcribed example

#00:01:06-8#

hello, its me Anish Chaulagain, from grade 10, representing occidental public school. #00:01:10-7#

hello, its me Prashant Gautam from class 9, representing occidental public school. #00:01:18-4#

its me Sajin Maharjan, from occidental public school, grade 10. #00:01:30-2#

first of all, good afternoon to everyone and today in this program of open spaces i am going to share some of our views regarding the open space of kathmandu and how it should be utilised. #00:01:47-7#

first of all kathmandu is an urban area where, where overpopulation is one of the major causes of misusing of open spaces. And open spaces are really in, really less in number in kathmandu because of over population. #00:02:35-3#

Many people are using the open spaces for building their home and doing, and letting it to be used as a open dumping site. And for the prevention and utilisation of open spaces some programs or some ideas are presented here and some of them are using the open space for park, gym, telestethic park, sanitation project on river side as our dhobi khola river is really poor quality, qualitative and we can use the open spaces for constructing futsal, play-playgrounds, parks, badminton court and many more. #00:02:56-5#
staying in kathmandu we are not getting open space for playing and doing some recreational stuff and the child, children of kathmandu valley are confined to video games and technologies. #00:03:13-7#

so they are not getting enough spaces to explore their environment and to do better for the area around them. #00:03:23-9#

they are not getting enough ideas and knowledge how their environment should be conserved and how it should be utilised. #00:03:35-3#

open spaces are the major reason where, major areas where people can use their utilise their time and and recreate their mind. #00:03:50-6#

now some ideas of open spaces are already introduced here and the only thing that is essential its utilisation. and if we all use our, and if we all use, stay together, work hard and develop different ideas, and develop different ideas then we can improve the quality of environment of the Kathmandu valley. #00:04:18-0#

and for the conclusion i would like to call my friend anish chaulagain. #00:04:21-7#

clapping #00:04:25-9#

O - Certification of Validation

Erklärung zum Wahrheitsgehalt der Angaben / Declaration concerning the truth of information given

Ich erkläre, die Angaben wahrheitsgemäß gemacht und die wissenschaftliche Arbeit an keiner anderen wissenschaftlichen Einrichtung zur Erlangung eines akademischen Grades eingereicht zu haben. / I declare that all information given is accurate and complete. The thesis has not been used previously at this or any other university in order to achieve an academic degree.

Mikkeli (Finland), 01.09.2023

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Eidesstattliche Erklärung / Declaration under oath

Ich erkläre an Eides statt, dass ich die Arbeit selbstständig und ohne fremde Hilfe verfasst, keine anderen als die von mir angegebenen Quellen und Hilfsmittel benutzt und die den benutzten Werken wörtlich oder inhaltlich entnommenen Stellen als solche kenntlich gemacht habe. / I declare under oath that this thesis is my own work entirely and has been written without any help from other people. I used only the sources mentioned and included all the citations correctly both in word or content.

Mikkeli (Finland), 01.09.2023

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Ort/Place, Datum (Date)   Unterschrift / Signature

Vorstrafen, Ermittlungsverfahren / Preliminary investigations

Hiermit erkläre ich, dass ich weder vorbestraft bin noch dass gegen mich Ermittlungsverfahren anhängig sind. / I hereby declare that I have no criminal record and that no preliminary investigations are pending against me.

Mikkeli (Finland), 01.09.2023

_____   _____

Ort/Place, Datum (Date)   Unterschrift / Signature