

Conceptualizing and Examining Equity in Basic Education at Yamunamai Rural Municipality

Aman Awale

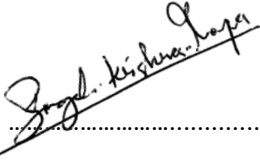


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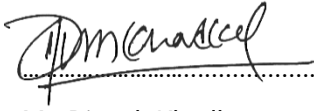
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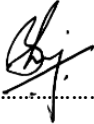


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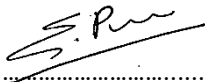
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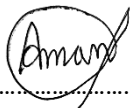
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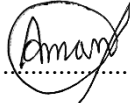
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Declaration

By signing, I certify that the paper titled "Status of Equity in Basic Education at Yamuna Mai Rural Municipality" is entirely original with no previous submissions to academic institutions for different degrees.

A handwritten signature in black ink, appearing to read "Aman", is written over a horizontal dotted line.

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Abstract

Equity in education is an integral part of sustainable development goals. To achieve equity in education for a particular area, it is necessary to identify the different dimensions of equity and inequity of that area. Different areas or settings have differences in inequality and equity.

This study focuses on the rural setting of Nepal and the study was conducted in public schools of Yamuna Mai Rural municipality, Rautahat, Nepal. This research was conducted in Rautahat District at 8 schools of Yamuna Mai Rural Municipality with the objective of identifying the dimensions of equity and inequity in public schools of Nepal in the rural setting. The identified dimensions were used to represent inequity and equity in basic education at public schools.

Moreover, this study has used Elaine Unterhalter's conceptual framework for identifying the dimensions of equity and inequity in education. According to this framework three dimensions of equity/inequity were equity from below, equity from above and equity from middle. Equity from below evaluates participation of students, equity from above evaluates equity rules in public education of Nepal and equity from middle evaluates return of investment in equity in education considering resources, movement and implementation of ideas as investment. The findings of this study highlight the inequity and equity in public schools with respect to participation of students in the classroom, availability of equity rules in school and return of investment in equity for education.

Keywords: *Dimensions, identify, basic education, rural*

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Acronyms

| | |
|---------------|--|
| CA | Capability approach |
| DOE | Department of Education |
| ECED | Early Childhood Education and Development |
| EMIS | Education Management Information System |
| ESIPs | Equity strategy implementation plans |
| SDG | Sustainable Development Goals |
| SLC | School Leaving Certificate |
| SSDP | School Sector Development Plan |
| UDHR | Universal Declaration of human rights |
| UNESCO | United Nations Educational, Scientific and Cultural Organization |
| UNICEF | United Nations International Children's Emergency Fund |
| VDC | Village Development Committee |
| YRM | Yamuna Mai Rural Municipality |

Introduction

1.1. Introduction

Equity is a multidimensional concept that focuses on positive discrimination. This concept gives emphasis to the disadvantaged or vulnerable group according to their need to achieve individual and social well-being. Well-being in education can only be achieved with the reduction of inequity in education, which is in itself a global issue. To tackle inequality in education the world is moving towards equity in education with sustainable development goal (SDG) 4 which is inclusive and equitable quality education.

Equitable quality education means quality education that addresses the needs of diverse students. Though equity was previously viewed as fair and equal distribution to all races or equal treatment to all races, this conceptualization limits the understanding of equity and its dimensions. In the present context, understanding the needs of individuals and providing adequate time and resources to address the needs of an individual according to their own capability is viewed as equity, which is more efficient than equal distribution regardless of the needs of an individual. Hence, this study examines and explores multi-dimensions of equity, which includes equity from the below, above, and middle using Elaine Unterhalter's (2009) dimensions of equity in education. These dimensions are linked with each other and focus on diversity within the capability approach developed by Amartya Sen. All three dimensions equity are vital for the expansion of capabilities in education. These dimensions are used to study equity from a micro level focusing on diverse individuals. Using equity from below, above, and middle participation of diverse individuals(below), equity rules or regulations (above), and equity programs (middle) are evaluated.

Moreover, by focusing on participation, regulations, and programs for equity in education it is easy to identify barriers for individuals with respect to their capabilities. To check whether an individual can achieve educational well-being, all these educational barriers and capabilities need to be accessed to identify their needs. Hence, this study is based on individuals of different gender, and religion from Yamuna Mai Rural Municipality (YRM) in the Rautahat district of Nepal. The study only focuses on basic education in public schools which is up to grade 8. According to Sen (2000), basic education is a catalyst of social change, which helps to overcome the traditional inequities of caste, class, and gender. The base for equitable quality education is basic education which tackles inequities in education. Inequity is a threat that could limit an individual's opportunities for development. Without basic education, an individual cannot properly use their rights. He/she cannot understand the rights given by the state and have problems claiming opportunities. To claim these opportunities for participation in education, equity rules for education and equity programs are needed in society. Within this context of equity in basic education, this research identifies dimensions of equity and inequity. Importantly,

examining the identified dimensions will help to improve the status of equity in basic education for a better future in the context of rural areas.

1.2. Problem Statement

Nepal has not achieved inclusive and equitable quality education in comparison to other countries around the world and the nation is still working on achieving equity in education. The major problem in equity is the identification of the needs of diverse individuals to reduce structural inequity. Structural inequity has created a difference in the quality of education between the disadvantaged group (vulnerable and marginalized) and the elite group (not vulnerable or deprived of opportunities) and there is existence of structural inequity in terms of participation, policy and flow of ideas and resources. This structural inequity has created parity in terms of outcomes in education.

The parity in terms of outcomes in education in rural areas of Nepal is poor because the needs of diverse students in rural municipalities need to be identified. Equity has been measured with the Equity index developed by the department of education Nepal to identify the dimensions of equity. This index is used at a macro level to collect data from different districts with different dimensions. The equity index uses dimensions such as social-economic status, gender, geographic location, disability, caste & ethnicity, health & nutrition status, language, and vulnerable groups for equity in education which has multiple dimensions which are not directly related to each other. Application of this index requires a lot of people involved along with sufficient resources.

For this study, these dimensions don't fulfill the criteria for studying equity in education at a micro level with emphasis on human heterogeneity for equity. The current dimension of equity in education isn't suitable to understand equity at the micro level with dimensions not related to each other. To fulfill this gap it is important to have dimensions that are related to each other to limit the measurement and get efficient dimensions of equity/inequity in education. In this study, Unterhalter's dimensions of equity from below, above and middle are appropriate and these criteria are also linked with capabilities. Emphasis in these forms of equity will lead to expansion of capabilities in education. These dimensions analyze equity in terms of rules (above), participation (below) and flow of idea or resource (middle) which are directly linked with each and provide a holistic representation of equity which can identify the needs of diverse students.

1.3. Objective

- a) To identify dimensions of equity/inequity in basic education at public schools.
- b) To examine equity/inequity in the public education system with the help of the identified dimensions.

1.4. Research Question

- a) What are the dimensions of equity/inequity in education for public schools?
- b) How does each dimension represent equity/inequity in education among students in public schools?

1.5. Scope of the Study

Equity policies are for diverse individuals to address their needs to address issues they face in their daily lives. This study aims to identify dimensions of equity and inequity in public education in the rural setting of Nepal. It explores the capabilities of diverse students in public schools and their process to achieve well-being in education. Barriers that restrict students from achieving educational well-being can be identified. This study is focused on public schools in rural areas. In Nepal for most of the disadvantaged group (poor, illiterate,) the government has produced equity policies in public schools which cater to the needs and wants of diverse disadvantaged groups. Public schools provide free basic education, mid-day meals, scholarships, and textbooks according to the equity policy for education. To study equity in education, it is important to evaluate public education in the context of Nepal. Since the majority of the equity policy of education is focused on public education. Equity in education is important to achieve quality education for all according to their needs.

1.6. Limitation of the Study

- a) This study only focuses on equity for education in public schools of rural areas in Terai.
- b) Micro-level research for equity in education only caters to individuals of the Yamunamai rural municipality at Rautahat.

Literature Review

This section is divided into two sections first section defines equity in education. It highlights definitions of various organizations and individuals focusing on equity. The transformation equity's definition from distribution to addressing needs of different disadvantaged individuals. The second section deals with conceptual frameworks for the measuring of equity in education and it discusses different dimensions of conceptual framework to measure equity in micro level for the study. Comparing national and international frameworks to measure equity in education and selecting the most suitable conceptual framework for this study.

2.1 Equity in Education

Equity has been defined as the quality of being equal, fair and right (Oxford English Dictionary, 2007) and the concept of equity in education considers the social justice ramifications of education in relation to the fairness, justness, and impartiality of its distribution at all levels of educational sub-sectors (Handbook For Measuring Equity in Education, UNESCO 2018). In both definitions equity has always been linked with rights and equal access to education and fairness in distribution, which turns equity into equality aspects. Instead of focusing on fairness of distribution equity must focus on diversity of individuals and needs of individuals for sustainability to achieve equitable education. For sustainability equitable education has been frequently mentioned in policies for education.

Equitable education has been frequently used in national and international documents for development. International agendas such as sustainable development goals have targeted access to education regardless of caste, ethnicity sex, age, race, color, ethnicity, language, religion, political or another opinion, national or social origin, property or birth, education as a human right, and education for equality. In our national documents (School Sector Development Plan) equity has been mentioned also talks about access to education, distribution of resources (mid-day meal, scholarship, textbooks, sanitary pads, multilingual education), and child rights. Both documents have a major focus on access to education and distribution of resources which are important however to achieve equitable education identification of diversity of needs of people should also be one of the major factors. Only access to education and resource distribution cannot address the needs of diverse individuals. Equity in education means quality education with respect to the needs of diverse individuals. Instead of only focusing on fair distribution, equity in education should focus on the needs of diverse individuals. Diverse individuals can be defined as the individuals who have faced inequity. Equity concepts have always focused on positive discrimination focusing on deprived and marginalized groups instead of privileged

groups. Contemporary frameworks of equity in the past have always worked for underprivileged groups. This framework includes:

- 1) John Rawl's contemporary framework of equity (1971) justice as fairness. This concept of equity has its own principle which is "The difference principle". This principle holds that inequalities are acceptable only if they are redressed to the greatest benefit of the most disadvantaged. To redress inherent disadvantages in opportunity and social mobility this framework values the concept of equity for the disadvantaged group.
- 2) Amartya Sen capability approach believes in recognizing individual capabilities with identification of barriers that limit an individual to reach his/her full potential. This approach recognizes inequity for an individual and helps identify the needs of the individual according to their capabilities. According to Sen (2000), Capabilities are a possibility to choose and to achieve something which helps you to reach wellbeing. Capabilities are a person's real freedom or opportunities to achieve functioning. Functioning are states of being (E.g., being treated equally) and doing (activities -attending class). When these capabilities are limited a person's chances of achieving well-being also becomes limited as well. For example- if a child is not being treated equally by the family which decided not to let him/her go to school. Then the child's capabilities are limited to the household and cannot achieve educational well-being.

Thus, from the above Contemporary frameworks of equity by John Rawl and Amartya Sen, equity has always been focusing on underprivileged groups.

2.2 Conceptual frameworks for the measuring of equity in education

Different organizations have their own definition of equity and have created conditions to measure equity. To measure equity in education globally many international and national agencies have created conceptual framework such as:

2.2.1 UNESCO's conceptual framework for equity

As mentioned in the first chapter UNESCO's definition of equity in education focuses on distribution. In relation to distribution this framework consists of five key concepts directly applicable to distribution which are:

- a) **Meritocracy:** This concept distributes educational opportunities on the basis of merit. Distributing education unequally on the basis of relevant differences of people. For example, extra classes for academically weak students and scholarships for financially weak students. This approach will be beneficial for any individual regardless of their background. This explains positive discrimination and adds the element of justice in distribution of education.
- b) **Minimum standards:** Based on the distribution of educational variables this concept reflects an agreed norm for education. For example- Access to basic education is a right (agreed norm) for every citizen of Nepal. To fulfill this norm our government has provided free basic education in public schools. To reflect

on this norm every student must receive free education in public schools to fulfill the minimum standards. Minimum standards evaluate the probability of an individual meeting the given standards.

- c) **Impartiality:** This concept is based on equality of opportunity regardless of differences (gender, wealth, caste, race, ethnicity, background); it aims to ensure all students reach minimum standards of learning according to their abilities. To measure impartiality the following measures are used:

Gap, difference: Difference between groups is measured. For example- difference in learning of between rich and poor background students or discrimination between male and female students. This measure uses cross-tabulation or disaggregated bar charts.

Ratio: This measure used parity indices. For example, gender parity index which calculates female to male values in a given indicator and also male and female teacher ratio.

Co-variation: Co-variation measures variables of inequality with correlation coefficient, slope of index of inequality, relative index of inequality, elasticity, proportion if variance explained by circumstances, ordinal segregation and dissimilarity index.

Concentration: According to UNESCO "The concentration curve plots the cumulative proportions of the population by wealth (starting with the most disadvantaged) against the cumulative proportions of education".

Group-level Cumulative Information: According to UNESCO "Measures of equality of condition, such as the standard deviation, can also be applied at the group level (e.g., between districts or ethnic groups), to explain the measure of impartiality in between different groups"

- d) **Equality of condition:** This concept measures distribution of the educational variable across people regardless of their different circumstances which are defined as equality of condition. To measure equality of condition the following measures are used:

Difference/Gap: The difference between highest and lowest indicator is measured by range and restricted range. For example- Difference between highest literate rate and lowest literate district.

Ratio: The share distribution of education received by the 10% top students divided by the share of bottom 40 % bottom students is known as Palma Ratio.

Dispersion: To calculate variance of standard deviation, coefficient of variation and mean absolute deviation in calculating equality of condition.

Concentration cumulative information: To calculate social welfare function, sum of median by sum of indicator, relationship between actual distribution and uniform distribution this tool uses Atkinson index, McLoone index, Lorenz curve and Gini coefficient. Theil index is also used based on the notion of entropy in information (Theil,1967).

- e) **Redistribution:** This measure is related to finance in education related to the distribution of resources. For example, the expenditure of the Nepal government in free basic education in Hilly and Terai region of Nepal. To measure redistribution, we use:

Weighted dispersion measure: Observation based on characteristics to apply equality of condition: For example- languages (Characteristics) used by students in each district and to formulate curriculum on the basis of language

Ratio Analysis: Indicator ratio in education. For example: government expenditure in rural and urban areas for basic education.

Regression slope: Relation between characteristics of indicator and effect of condition. For example, public expenditure in language curriculum (condition) relation with learning outcome of students (indicator)

Elasticity: According to UNESCO "The percentage effect of a 1% change in the characteristic (e.g., poverty) on the indicator (e.g., government education expenditure)"

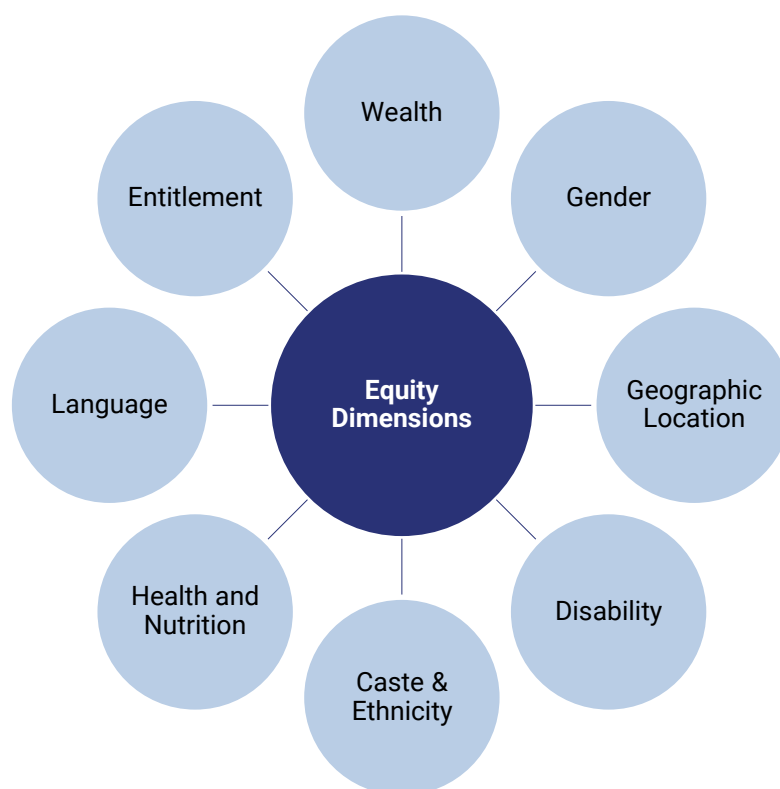
Thus, it can be argued that the above can be argued that mentioned concepts focus primarily on the distributional aspect and can be used by organizations for macro level research in measuring equity. The above conceptual framework on equity suggested by the UNESCO potentially contributes to strengthening the disadvantaged groups by putting to use the five concepts. However, such conceptualization needs further refinement and a complementary, an alternative framework can be sought for in this regard, this research attempts to offer an alternative pathway to examine, explore and understand equity in public education which arguably a compliment to the already existing concepts that represent the notion of equity.

2.2.2 National conceptual framework for equity

To strengthen equity in education the government of Nepal developed the Consolidated Equity Strategy for the school education sector in December 2014. Its main objective was to reduce disparities in access, participation and learning outcomes in basic and secondary public education in Nepal. The Equity index for education was developed by this strategy.

Equity Index was a tool developed to measure disparities with multiple dimensions to be used at district, rural municipality and municipalities. The main purpose of this tool was formulated for core planning and monitoring for full-fledged implementation of the Consolidated Equity Strategy and targeted the most disadvantaged districts for specific intervention. The purpose of the equity index was to account for children's opportunity for school education as well as the equality of opportunity across children facing different circumstances/contexts.

Figure 1: Equity dimensions and drivers of disparity according to equity index of Nepal



Source: American Institute of Research (AIR) & National Institute for Research and Training (NIRT). (2017).

The equity dimensions as represented in figure 2 are wealth, gender, geographic location, disability to name a few, each of these are measures to get a nuanced picture of equity and the sources of data for each dimension are mentioned accordingly in figure 2. This framework uses data from the national census and Education Management Information System (EMIS) for district level analysis of education. This multidimensional framework is used in macro level measurement of equity to make comparison between districts with regards to public education.

Table 1 – Proposed Outcomes of equity index.

| Indicator | Source of Data | Dimensions of Equity | Level of Disaggregation | Levels of Education | Frequency |
|--------------------|----------------------------|---|---|---|--|
| Out of school rate | EMIS and population census | Gender, additional dimensions (location, caste/ethnicity, mother's education) if dataset is made available to DoE. | District only | Basic education (1-8) | Every year for gender, once for additional dimensions if they become available |
| Survival rates | EMIS | Gender, location caste/ethnic groups using exact figures. Disability using available data on enrolment and estimates for repetition. Disability may be computed exactly once individual student information (or more disaggregated information) becomes | District, VDC, school for average, district only for disparities along dimensions of equity | Basic education (1-8), secondary (9-12) | Every year |

| Indicator | Source of Data | Dimensions of Equity | Level of Disaggregation | Levels of Education | Frequency |
|--------------------|---|--|--|---|--|
| Out of school rate | EMIS and population census | Gender, additional dimensions (location, caste/ethnicity, mother's education) if dataset is made available to DoE. | District only | Basic education (1-8) | Every year for gender, once for additional dimensions if they become available |
| | | available at central level. | | | |
| Learning outcomes | SLC 8 th grade district exam data | Gender | District, VDC, school for SLC. VDC and school only for 8 th grade exams (no comparability between districts). | 10 th grade for SLC 8 th grade for district exam | Every year |

Source: UNICEF. (2018). *Equity Index Outline Paper*

The above table 2 explains how the equity index achieves its outcomes using indicators with the current sources of data. This framework is different from UNESCO's framework which focuses on distribution while it focuses on key areas such as wealth, gender, geographic location, disability, caste and ethnicity, health and nutrition, language and entitlement. The indicators of this framework focus more on inequalities faced by the students of different backgrounds with specific eight dimensions. The dimensions of this framework are useful to understand equity at the micro level. However, it is still difficult to examine equity at this level because of its complexity and interconnected indicator.

2.2.3 Elaine Unterhalter's Conceptual framework

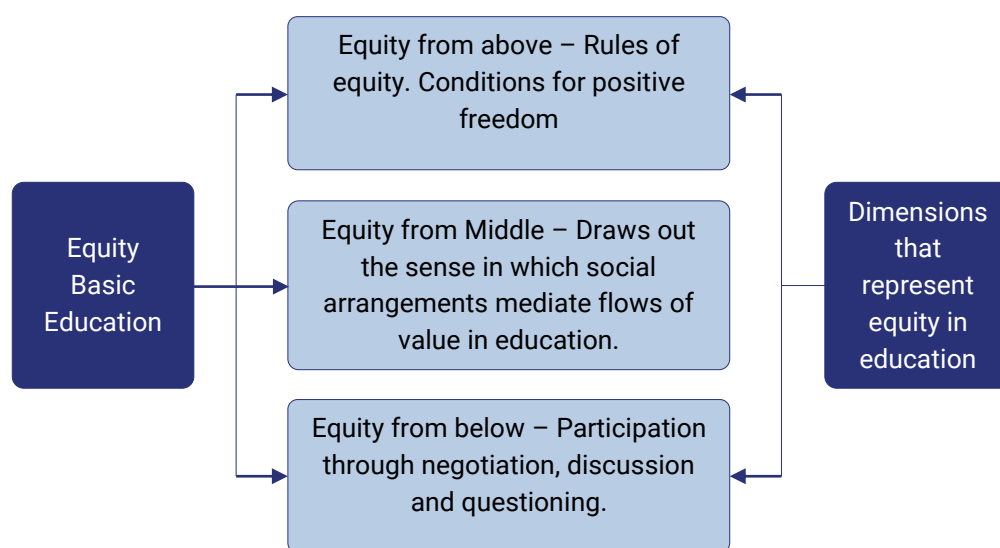
According to Unterhalter (2009) equity in education can be viewed from three dimensions: equity from below (Participation -negotiation and discussion for equity in education), equity from above (rules and regulation of equity), and equity from the middle (social arrangements mediate the flow of value in education, Example- efficiency of the library in school). These three dimensions represent equity in terms of rules, negotiation, and discussion through overall participation and efficiency of facilities according to investment (time, money, idea, skill, organization) which go beyond fair distribution. For example – according to the constitution of Nepal free and compulsory basic education is a rule under article 31(equity from above) and is distributed in public schools. The quality of distribution according to the diverse needs of students in education is monitored by equity from the middle. Equity from below monitors the voice or participation of students in the school which determines whether students are able to express their thoughts. These three dimensions of equity in education can expand the capabilities of a person for education (Unterhalter, 2009). These dimensions of equity represent equity in education in a holistic manner with respect to the capability approach in order to enable conditions for quality education for a diverse group.

Capabilities according to Amartya Sen's capability approach which recognizes different goals or ends for different people. Sen explains that evaluation framework equity must consider differences. He argues that one must go beyond "commodity

fetishism” that only focuses on the distribution of money or goods instead freedom of people to achieve their wellbeing must be evaluated. The capabilities approach focuses on means to achieve freedom for an individual. It is linked with equity as it focuses on conversion factors of diverse individuals which determine the capability set of an individual to achieve wellbeing. The capability approach provides an alternative way to evaluate equity in basic education. The capability approach examines opportunities the available resources offer with respect to the current circumstances of a person. It exposes inequities that a person faces due to his/her limited resources and external circumstances. Inequities such as lack of interest in studies (personal), school closure due to flood (environmental), and non-supportive parent (social). These conversion factors ((personal, social, and environmental) affect the student’s capability set as he/she doesn’t have equal opportunity to achieve educational wellbeing. These social constraints that influence and restrict well-being result in inequity.

Moreover, conversion factors (Sen, 2000) such as personal, social, and environment affect one’s capability set. Capability set is the option to choose opportunities. For example, a student can choose to go to university to achieve quality education related to the field to his/her field of interest. To achieve quality education the student needs to achieve proper functioning according to the capability set. Functioning is the set of doing and being. Being is considered the state of a person such as being healthy/unhealthy, being treated fairly/unfairly or being positive/negative. Doing are activities for achieving functioning for example going to school for education. Functioning achieved leads to wellbeing of an individual. For example, going to school would facilitate the educational wellbeing of the child. The capability approach provides an alternative way to view equity in education. Instead of focusing only on resource distribution, it examines what opportunities the available resources offer with the present conversion factors. The capability approach identifies multi-level inequalities in education which helps us measure equity in education. It is suitable to measure equity as it defines the choices people have in order to establish the minimum enabling condition with regard to quality education (Oostrum, 2013). For example- To achieve educational well-being, a person must choose to go to school regularly and must understand the content being taught. To enable the condition, capability approach defines conversion factors that constrain the student to understand. Identification of this constraint could help us develop a multilingual education policy (equity from above). This could increase the quality of education as students will help students achieve educational well-being.

Figure 2: Dimension of Equity in Education



Source: (Unterhalter, E. 2009).

A) Equity from below

Equity from below: Equity from below defines equity as the behavior of equally treating people by their doings. Equity is a behavior that is valued by people to establish fairness and tolerance. Fairness provides freedom for any individual to achieve regardless of their background (wealth, caste, gender, and race). Sen's capability approach also respects human diversity to shape the capability set of a person. It argues that the metric of interpersonal comparison needs to take human diversity as a central concern (Sen, 1992).

To respect human diversity, equity in education consists of a space of negotiation in which particular concerns of a group or individual are discussed through participation. During this process equity is achieved by reasonableness and reflection that focuses on the opinion of each person participating in the discussion according to the concept of fairness. A fair relationship includes supports negotiation, questioning and discussion between people. Equity from below emphasizes the capability approach on agency and process of freedoms and in Sen's interest in deliberative democracy (Sen, 2005). The condition of equity from below supports the development of agency and freedom of diverse individuals in its process to enhance alternatives for an individual by expanding a capability set.

Reflecting on a range of possibilities, alternatives for diverse individuals can be found. Implementation of negotiation, discussion, reflection and questioning can be understood with the example of multilingual education in Nepal. The government has developed Curriculum Development Center (CDC) and has already created a curriculum for 24 regional languages so that students can easily understand the curriculum. From the lens of equity from below if students and the government had a negotiation space where they could discuss the curriculum that was going to be designed for them. The discussion between these two groups would allow us to identify the needs and interests of both groups.

Moreover, questioning and reflection identification of the language, which is suitable and applicable for both groups, could be designed. Students can question the government to teach Nepali so that the current problem of communication between the government and students could be avoided. In government offices officials use Nepali for communication and documentation, which creates communication barriers for students who speak and write in other languages. From this example it can be concluded that equity from below is essential to facilitate development of agency for diverse individuals to participate in the society. Participation of all individuals in society with respect to their conversion factors is important according to capability approach. Equity from below addresses the problem of participation by providing a space for participation so that each individual has the opportunity to question and discuss the current inequity they have been facing. The voices of each individual are represented by equity from below.

B) Equity from above

Participation in discussion, negotiation and questioning is not enough to regulate equity in education. Groups and individuals with strong backgrounds tend to dominate in the participation phase. In the 16th century equity in terms of law making was introduced by the King and the church for natural justice (Unterhalter, E. 2009). To ensure participation of all equity rules or conditions of positive freedom requires respecting the voices of all individuals of different backgrounds which is known as equity from above. This form of equity regulates the actions according to its conditions (rules, reasons, and rights) which are recognized by the judiciary of the community. This meaning of equity in education indicates that there are rules that have been decided as fair and reasonable by some widely recognized body of opinion (Unterhalter, 2009). For example – In the context of Nepal the Education Policy 2076 and School Sector Development Plan (SSDP) consist of equity policies (rules, reasons, rights) for education. Equity policies such as free basic education can be considered as an example of equity from above. It is the obligation of stakeholders of equity to satisfy the rights for diverse people.

The authority (stakeholders of equity) would come in the original position according to the social contract to exercise two moral powers according Elaine Unterhalter which are:

1. **A capacity for a sense of justice:** Without a sense of justice which is one of the key concepts in the formation of equity, stakeholders cannot formulate proper rules for equity. It is necessary for stakeholders such as equity policy makers to view rules from different angles of justice. For example- a policy for scholarships for students whose families are financially weak. Then that policy should have criteria to determine the families as financially weak such as total family income, family health and other quality of life indicators. If a rule is established without criteria it will have loopholes that would lead to faulty beneficiaries such as individuals with good financial background claiming to be financially weak for scholarships.
2. **A capacity for a conception of the good:** The formation of good for different disadvantaged groups is one of the central concerns of equity. Stakeholders must have the capacity to do good for the community. For example- To

ensure public good and access to education for all schools must have a child friendly environment and disable friendly. Inclusion of all children regardless of the population of minority and majority. Problems in inclusion must be dealt with coordination between stakeholders to increase the capacity for public good.

3. From the above moral powers rules of fairness are formulated with respect to individual differences which shape the process and agency freedom connected with expansion of capability set concerning the nature and value of education. For example, according to the constitution of Nepal 'no child shall be subjected to child marriage' but still Nepal is ranked 10th in prevalence of child marriage (UNICEF, 2019). This indicates that society still accepts child marriage even though the judiciary is against it. To remove child marriage rules which facilitate programs against child marriage should be formulated. The current law imprisons for parent or guardians who facilitate child marriage. With imprisonment the law could add 5 years of community programs against child marriage for the criminals. This would help the community to change their views for child marriage and facilitate programs against it. From the above paragraphs it can be argued that equity from above is essential ensuring fair participation to expand the capability set of diverse individuals.

C) Equity from the middle

Equity from below provides insight in participation for equity and equity from above facilitates participation by applying conditions (rules) for participation. To evaluate both these forms of equity in the 18th century, equity was associated with finance and a process of redeeming money or making investment known as equity from the middle (Unterhalter, 2009). Equity is conceptualized as share or ownership that has value in the prevailing social arrangement of the market (Unterhalter, 2009). For example, according to the education policy for equity (equity from above) basic education is free of cost in public schools after participation (negotiation, discussion and questioning) of policy makers in the ministry of education. But to make education free of cost, we need programs for the movement of ideas, investment, skill and organization which can only be fulfilled by equity from the middle.

Furthermore, programs of equity from the middle evaluate effectiveness of rules created by court in equity programs. For example, Free Basic education (rule) investment (money, time, organization in free basic education programs with their return will be checked by equity from the middle. Same goes for participation (equity from below) investment of time and resources for discussion and their return is evaluated by equity from the middle. Example for this entails students discussing (negotiation and questioning) on multilingual policy with the government. The amount of time and resource of the stakeholders in equity and the return of that investment (time, resource) is evaluated by equity from the middle.

In expanding the capability set it is important to consider redistribution to address the needs of different disadvantaged groups. The extent to which the disadvantaged groups are distributed investments with quality returns. The distribution or investment in equal shares is not considered as methods to reduce

the unfairness in the current social arrangement in education. Here, the example includes providing a certain number of scholarships for lower caste groups in Nepal such as Dalits (lower caste according to hierarchy of the society). A small portion of elite Dalits will receive seats for scholarship from their share of education but the rest of the Dalits will have fewer chances to get educated. To fairly address this problem Dalits could receive proper early childhood development (ECD) instead to compete against other castes in the society for the number of seats. With emphasis in ECD there could be an increase in the participation of students who are considered a minority in school. This is how equity from the middle practices fair limits on educational capabilities.

Thus, it is suggested that all three forms or dimensions of equity as argued by Elaine Unterhalter are essential for the expansion of capabilities in education with respect to human diversity. For micro level research this conceptual framework is applicable since all its dimensions are linked with each other and represent equity in a holistic manner. This framework further puts emphasis on individual differences rather than focusing on distribution (UNESCO's framework) and the direct linkage between all three dimensions of equity makes it easier to measure equity rather than measures in 8 different dimensions of equity as suggested in the National framework for attending educational equity. With respect to capability approach the three forms of equity cover major concepts of justice, rights, disadvantaged groups and redistribution of investments for equity.

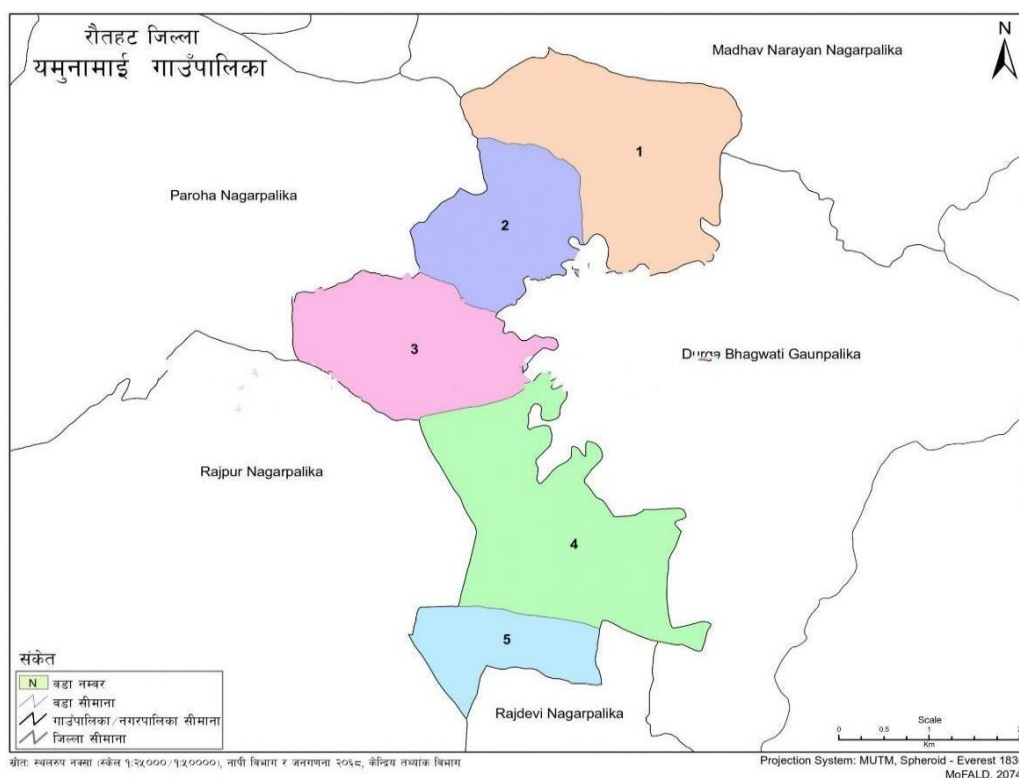
Methodology

This research used a quantitative method that uses surveys as the major method.

3.1 Selection of the Study Site

This study was conducted in Yamuna Mai Rural Municipality (YRM) in Rautahat district of Madhesh province of Nepal. Rautahat has the lowest literacy in Nepal of only 42% ("Nepali Times,"2019). To identify equity and inequity, this district is suitable to fulfill the objective of this study with diverse caste, ethnicity, language and class of students.

Figure 3: Yamunamai Rural Municipality Map



3.2 Duration of the Study

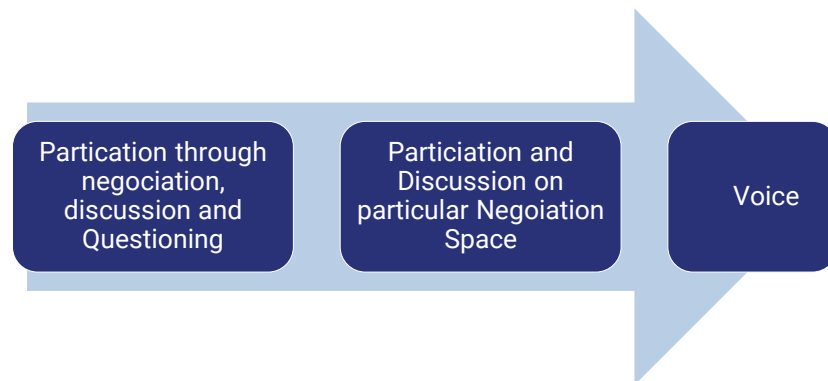
The duration of this study was 5 months from May 2022 to September 2022.

3.3 Methods of Data Collection

Qualitative methods such as key informant interviews were used for data collection with education officers and teachers of the school. Focus group discussion was conducted with the students to measure participation. Survey used as quantitative method for overall evaluation of policy, participation and implementation of equity programs. The conceptual framework to measure equity in this study is as follows

1) Equity from below:

Figure 4: Measurement of equity from below



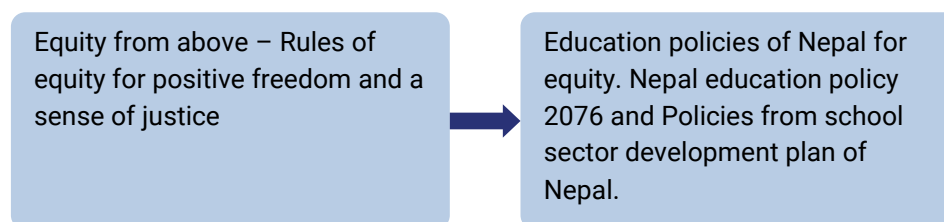
Using Elaine Unterhalter’s conceptual framework this dimension of equity in education will evaluate the participation level of students from different caste, gender and ethnicity. As mentioned in the previous chapter equity from below provides space for negotiation to question and discuss about equity. In the context of YRM schools the comparison between students to identify equity and inequity in participation will be evaluated. Participation during question/answer session entails hand rising regarding issues in class. The voice of students has been used to identify equity/inequity. In this study, participation in negotiation, discussion and questioning has been utilized to detect different dimension of equity.

The indicator for identifying equity from below through participation in this framework is voice according to Walker and Unterhalter (2007, July). *Amartya Sen’s Capability Approach and Social Justice in Education* which is a capability that represents equity in education for children for participation. According to Walker (2007) voice is key for participation in learning and for speaking out not being silenced” for gender equity in education. Participation is one preliminary list of capabilities relevant for children to have a fair share of influence and also receive relevant information.

Voice – Voice indicates the participation of students in school with the teachers with respect to the definition of voice for gender equity framed in education. Voice represents equity for students of different caste/ethnicity, gender and religion instead of representing only gender equity. From the above measures of equity from the below the process of reasonableness and reflection during participation students in discussion/questioning is evaluated.

2) Equity from above:

Figure 5: Measurement of equity from above



Equity from the above ensures justice and fairness for students. Likewise, the education policy of Nepal focuses on sustainable development goal 4 which focuses on equitable quality education as the School Sector Development Plan recognizes this equity from above. The following are equity rules that which measure equity from above in public education in YRM:

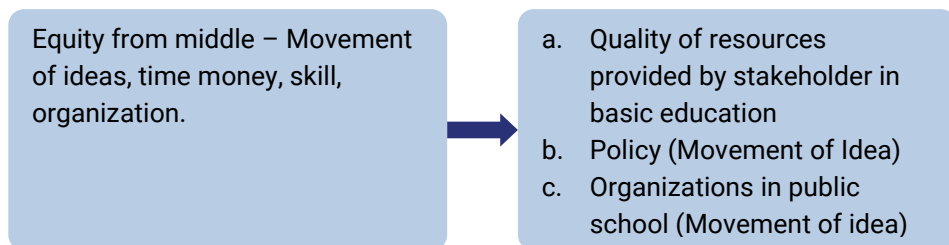
- a) **Compulsory and free education:** According to the constitution of Nepal 2015, basic education is free and compulsory in public schools of Nepal. This includes free education with stationery for students.
- b) **Mid-day meal:** Students from grades 1 to 6 are provided mid-day meals by the local government. According to the national budget of education 2022/23 from the next fiscal year (16th July 2022), this policy will be implemented in public schools to ensure participation in basic education.
- c) **Scholarships and Incentives:** Our government has been providing scholarships to protect the right to education of economically and socially marginalized and endangered communities including Chepang, Raute, Badi, Majhi, Musahar, persons with disabilities, Dalits, Muslims, families of martyrs, conflict victims, families of COVID-19 victims, and HIV / AIDS infected children.
- d) **Health and Nutrition:** The School Sector Development Plan has been translated from the 2015 Nepali Constitution, which offers free basic health care, emergency health services, and sufficient sanitation in schools (2016-2023). Free medical care can be managed in schools under the 2018 Act Relating to Free and Compulsory Education. However, one of the main impediments to ensuring equity in education in Nepal is now health and nutrition.
- e) **Safety and Security:** Children are protected from many sorts of violence, including physical, social, sexual, and mental abuse, under the 2015 Nepali Constitution. The 2000 Child Labor (Prohibition and Regulation) Act the Act limits the number of hours that minors between the ages of 14 and 16 may work (to a maximum of 36 per week) and forbids the employment of children under the age of 16 in dangerous jobs. Since Article 39(5) of Nepal's 2015 Constitution states that "no child should be subjected to child marriage," the Act Relating to Compulsory and Free Education of 2018 forbids child marriage.
- f) **Mother Tongue-Based Multilingual Education:** The Nepali Constitution of 2015 protects children from minority groups' linguistic rights, enabling them to get a fundamental education in their home tongue. The use of mother language in education as a medium of teaching and subject of

instruction is made possible by the Act Relating to Compulsory and Free Education 2018 and the School Sector Development Plan (2017–23). The Curriculum Development Center (CDC) has already created a curriculum for 24 regional languages, and over 3000 public schools employ minority languages (Bantawa, Tamang, Doteli, Bajika, Newar, Tharu, and so on) as the primary medium of instruction.

The above six rules for equity are the indicators for the measurement of equity in this study. It is essential for every public school to obey these rules which are accepted by every public school which is recognized by the government. It is the obligation of stakeholders (school and parents) associated with basic education to satisfy the rights of diverse students studying in public school.

3) Equity from middle:

Figure 6: Measurement of Equity from the middle



This form of equity evaluates the outcome of investments (ideas, time, money, skill, organization) in public education. The return after the investment includes social arrangements that have sufficient market flows to facilitate public education and learning of students. To measure this equity from the middle in YRM the following indicators are used:

a) Quality of resources provided by stakeholders in basic education

From this indicator, we will view whether students are provided proper classroom resources (desk, bench, board, stationery). This indicates the quality of resources rather than their distribution. Resources that have been provided by the state for equity are evaluated in terms of availability, importance and satisfaction. The amount of time, skill, idea, and money invested by stakeholders for students for these resources and the return of investment for students of public school is measured. Resources are conversion factors that improve the capability set of a student. For example, A student has the freedom to choose to eat in public school with mid day's meals in school. This choice provides proper functioning of being healthy/unhealthy and eating meals in school. It could fulfill the physical wellbeing of the student.

b) Policy

Policy can be defined as an idea that is implemented by an organization to collaboratively work with all the stakeholders. With this indicator measurement of efficiency of the policy of education in Nepal is done.

Policy implementation is equal to the movement of ideas being implemented. The movement of ideas is an investment of time and skill. This investment should provide a return for students for their education. Regarding scholarships for poor students a poor student must get access to education from this policy. The quality of scholarship will be tested whether the students are treated equally or not. What benefits have this policy provided to the students in public school? Equity rules (policy) are huge investments in public education of Nepal which should provide high return for public school students.

c) Organization

Organizations are responsible for the movement of ideas. For example, the public school is an organization that supplies education. Funded by the state, public schools are responsible for the overall condition of public education. This indicator will check the investment done by all stakeholders (government, public school, Public School) is properly functioning for the students. Does the flow of quality education reach the students at the public school? Does the teacher promote the idea of equitable education in class with all students getting fair treatment regardless of their backgrounds? All the three forms of equity are essential for the expansion of capabilities in education with major emphasis in human diversity.

3.4 Selection of respondents

This study was conducted in 8 public schools of Yamuna Mai Rural Municipality. Stratified random sampling was used to select students of different gender and class. Random sampling method was used to select respondents of teachers and convenience sampling was used to select the education officer of the ward. A total of 230 students participated in the survey with 114 boys and 116 girls.

Findings and Discussion

4.1 Participation of different students in the classroom

This section explains equity from below (Participation) of students from different ethnic groups, sex and religion. Participation of students in discussion and questioning is measured with respect to their negotiation space (classroom). The following tables and charts provide the variation in participation at Yamuna Mai Rural municipality, Rautahat:

- 1) **Gender and Participation:** Gender is limited to male and female in this study. When asked “do you ask question in class (PAR_1)” the response of students can be evaluated in the table below:

Table 2 – Participation of male and female in question/answer session

| | | | Par_1 | | Total |
|--------|--------|-----------------|-------|-------|--------|
| | | | No | Yes | |
| Gender | Female | % Within gender | 8.6% | 91.4% | 100.0% |
| | Male | % Within gender | 7.0% | 93.0% | 100.0% |
| Total | | % Within gender | 7.8% | 92.2% | 100.0% |

Source: Field Work, 2022

Table 3: Level of participation of students in question/answer session

| | | | Par_2 | | | | | Total |
|--------|--------|-----------------|------------------|------------------------|------------------|--------|-------|--------|
| | | | Most of the time | About half of the time | Some of the time | Seldom | Never | |
| Gender | Female | % Within gender | 27.6% | 22.4% | 40.5% | 4.3% | 5.2% | 100.0% |
| | Male | % Within gender | 32.5% | 19.3% | 39.5% | 4.4% | 4.4% | 100.0% |
| Total | | % Within gender | 30.0% | 20.9% | 40.0% | 4.3% | 4.8% | 100.0% |

Source Field Work, 2022

In figure 4 we can analyze that more than 90% of females and males said yes, they were asked questions regarding class participation, “there is very little difference in male and female participants” with only 8.6% female and 7% male saying no they don’t participate in class. When asked “how often do you participate in class” (figure 4.1) ranking from 1st to 5th position in Likert scale. From the table it can be observed that the participation of male and females are almost the same with only 0.1- 1.5 percent difference in participation from rank 3rd (some of the time) to 5th (Never). This show from a gender perspective there is very small variation in participation of male and females. Besides, when students are analyzed from a participation perspective only 30% participate most of the time and 20.9% participate half of the time. From the perspective of equity from below (participation) this represents inequity in

participation level with 49.1% participants participating some of the time, seldom and never. Questioning, discussing and negotiating are the three main pillars of equity from below which require participation of all regardless of their identity.

Table 4 – Shyness to raise hands to question the teacher

| | | | Par_3 | | | | | Total |
|--------|--------|-----------------|------------------|------------------------|------------------|-------|--------|--------|
| | | | Most of the time | About half of the time | Some of the time | Never | Seldom | |
| Gender | Female | % Within gender | 5.2% | 12.1% | 15.5% | 57.8% | 9.5% | 100.0% |
| | Male | % Within gender | 1.8% | 8.8% | 15.8% | 66.7% | 7.0% | 100.0% |
| Total | | % Within gender | 3.5% | 10.4% | 15.7% | 62.2% | 8.3% | 100.0% |

Source Field Work, 2022

When asked “How often do you feel shy to raise your hands in class” according to the above table, female students are more shy than male students. The sum of the percentage of shyness from most of the time to some of the time for female students is 32.8% whereas for male students it is 26.4%. 57.8% females never feel shy which less than males is (66.7%). From a gender perspective females have felt too shy to raise their hand to ask questions. Questioning and discussion for students are key for equity. From data analysis, the study indicates that if students are shy, then inequity in participation can be identified in the negotiation space (classroom).

Table 5 – Eye contact with teacher while talking to them (Par_4)

| | | | Par_4 | | | | | Total |
|--------|--------|-----------------|--------|---------|------------------------|--------|-------|--------|
| | | | Always | Usually | About half of the time | Seldom | Never | |
| Gender | Female | % Within Gender | 31.9% | 20.7% | 12.1% | 3.4% | 31.9% | 100.0% |
| | Male | % Within Gender | 33.3% | 18.4% | 7.9% | 8.8% | 31.6% | 100.0% |
| Total | | % Within Gender | 32.6% | 19.6% | 10.0% | 6.1% | 31.7% | 100.0% |

Source: Field Work, 2022

Teachers claim that excellent teacher-student engagement includes making eye contact with students, which is when they are looking at each other (Korthagen et al., 2014). The nonverbal communication between teachers and students, includes teacher gaze, conveys interpersonal interactions between them (Haataja, et al, n.d.) When asked “Do you make eye contact with the teachers while talking to them?” 35.3% females responded seldom and never whereas in males 40.7% responded seldom and never. This shows that both males and females hesitate to make eye contact. Eye contact is an important ingredient for teacher-student engagement and it facilitates discussions, questioning and negotiation. This shows from perspectives of (equity from below), there still inequity among students who aren’t participating in the classroom.

- 2) **Religion and participation:** Hindu, Muslim, Christian and Muslim were listed as religions. From the data of table 1.4 we could only find Muslim (17.83%) and

Hindu (82.17%) students in YRM. More than 90% students in both religions have said yes, they participate in class for question-and-answer sessions.

Table 6 - Participation according to religion in question/answer session

| | | | Par_1 | | Total |
|----------|--------|-------------------|-------|-------|--------|
| | | | No | Yes | |
| Religion | Hindu | % Within Religion | 7.4% | 92.6% | 100.0% |
| | Muslim | % Within Religion | 9.8% | 90.2% | 100.0% |
| Total | | % Within Religion | 7.8% | 92.2% | 100.0% |

Source Field Work, 2022

Table 7 – Level of participation in class according to caste.

| | | | Par_2 | | | | | Total |
|----------|--------|-------------------|------------------|------------------------|------------------|--------|-------|--------|
| | | | Most of the time | About half of the time | Some of the time | Seldom | Never | |
| Religion | Hindu | % within Religion | 30.2% | 21.7% | 39.7% | 3.2% | 5.3% | 100.0% |
| | Muslim | % within Religion | 29.3% | 17.1% | 41.5% | 9.8% | 2.4% | 100.0% |
| Total | | % within Religion | 30.0% | 20.9% | 40.0% | 4.3% | 4.8% | 100.0% |

Source: Field Work, 2022

The level of participation is slightly different in Hindus and Muslims with only 8.5% Hindus and 12.2% Muslims responding to never and seldom as the level of participation. From the perspective of religion and participation there is small variation in low level of participation. But from a participation perspective (equity from below) the voices of 20.7% students who responded seldom and never in participation must be prioritized. Their voices must be heard in the negotiation space (classroom) for questioning and discussion.

Table 8 – Shyness to raise hand in class according to religion (Par_3*Religion)

| | | | Par_3 | | | | | Total |
|----------|--------|-------------------|------------------|------------------------|------------------|--------|-------|--------|
| | | | Most of the time | About half of the time | Some of the time | Seldom | Never | |
| Religion | Hindu | % within Religion | 4.2% | 10.1% | 14.8% | 9.0% | 61.9% | 100.0% |
| | Muslim | % within Religion | | 12.2% | 19.5% | 4.9% | 63.4% | 100.0% |
| Total | | % within Religion | 3.5% | 10.4% | 15.7% | 8.3% | 62.2% | 100.0% |

Source: Field Work, 2022

From the above table it can be indicated that 29.1% Hindu's and 31.7% Muslims students are shy from 5 (most of the time) to 3(some of the time) and remaining have rated from seldom to never. Both religions have similar percentages of inequity experiences in education. From participation perspective (equity from below) the voices of both religions must be viewed to reduce this inequity of more than 30% in terms of religion.

Table 9 – Eye contact of students with teacher while talking to them

| | | | Par_4 | | | | | Total |
|----------|--------|-------------------|--------|---------|------------------------|--------|-------|--------|
| | | | Always | Usually | About half of the time | Seldom | Never | |
| Religion | Hindu | % Within Religion | 30.7% | 18.5% | 9.5% | 6.9% | 34.4% | 100.0% |
| | Muslim | % Within Religion | 41.5% | 24.4% | 12.2% | 2.4% | 19.5% | 100.0% |
| Total | | % Within Religion | 32.6% | 19.6% | 10.0% | 6.1% | 31.7% | 100.0% |

Source: Field Work, 2022

41.3% Hindus and 21.9% Muslims have responded that they seldom or never make eye contact with teachers. This shows huge difference in participation of Hindu students compared to Muslim students from the above table. From equity from below voice of Hindu and Muslim must be questioned or discussed to reduce inequity in participation.

4.2 Availability of equity rules in Nepal

Based on equity from above according to figure 3.2 of the methodology section, this section evaluates the availability of equity rules in Nepal according to equity from the above perspective. The availability following equity rules for Basic education in public school was analyzed:

- a) **Compulsory free education:** The availability of scholarship (R_A_scholar- Table 1.8) is 63% (total of available, positively available and highly available) which is questionable since basic education is free in public schools of Nepal according to the equity policy for education. Whereas the availability of textbooks in schools (figure 4.9) 96.1 % overall, which shows that this rule has been implemented well? From the perspective of equity from above, free basic education in public school (rule) has been followed by most public schools. Still availability of scholarships must be improved with schools with 37% not providing scholarships and charging examination fees.

Table 10 – Availability of scholarship in public schools

| | | Percent | Valid Percent | Cumulative Percent |
|-------|----------------------|---------|---------------|--------------------|
| Valid | Highly available | 22.2 | 22.2 | 46.5 |
| | Positively available | 16.5 | 16.5 | 100.0 |
| | Available | 24.3 | 24.3 | 24.3 |
| | Negatively available | 17.0 | 17.0 | 83.5 |
| | Highly unavailable | 20.0 | 20.0 | 66.5 |
| | Total | 100.0 | 100.0 | |

Source Field Work, 2022

Table 11 - Availability of textbook

| R_A_t | | Percent | Valid Percent | Cumulative Percent |
|-------|----------------------|---------|---------------|--------------------|
| Valid | Highly available | 46.5 | 46.5 | 56.1 |
| | Positively available | 40.0 | 40.0 | 97.0 |
| | Available | 9.6 | 9.6 | 9.6 |
| | Negatively available | 3.0 | 3.0 | 100.0 |
| | Highly unavailable | .9 | .9 | 57.0 |
| | Total | 100.0 | 100.0 | |

Source: Field Work, 2022

Table 12 - Availability of Mid-day meal

| R_A_mdm | | Percent | Valid Percent | Cumulative Percent |
|---------|----------------------|---------|---------------|--------------------|
| Valid | Highly available | 26.1 | 26.1 | 53.0 |
| | Positively available | 27.8 | 27.8 | 100.0 |
| | Available | 27.0 | 27.0 | 27.0 |
| | Negatively available | 8.3 | 8.3 | 72.2 |
| | Highly unavailable | 10.9 | 10.9 | 63.9 |
| | Total | 100.0 | 100.0 | |

Source: Field Work, 2022

Table 13 – Availability of first aid

| R_A_fa | | | | |
|--------|----------------------|---------|---------------|--------------------|
| | | Percent | Valid Percent | Cumulative Percent |
| Valid | Highly available | 11.3 | 11.3 | 34.3 |
| | Positively available | 28.7 | 28.7 | 100.0 |
| | Available | 23.0 | 23.0 | 23.0 |
| | Highly unavailable | 20.9 | 20.9 | 55.2 |
| | Negatively available | 16.1 | 16.1 | 71.3 |
| | Total | 100.0 | 100.0 | |

Source: Field Work, 2022

- b) **Health** - Food (Mid-day meal- R_A_mdm) and first aid (R_A_fa) are important for the health of students in public schools. Still Mid-meal is unavailable to 19.2% (Sum of negatively available and highly unavailable) which is the need of students up to grade 8 but is provided till grade 6 according to current policy. Mid-day is one of the successful rules

37% students have responded to being highly unavailable and negatively available for first aid. First aid is the requirement of public-school according to equity rules of public school. This shows vulnerability or inequity in health. Health services are vital for students which directly affects their performance in school. From an equity perspective, inequity in first aid can be observed with more than one third of students not receiving first aid which should be provided in schools according to the 2018 Education Act relating to free and compulsory education.

- c) **Safety and security** – Equity rules protect students from any forms of violence under the constitution of Nepal 2015 children are protected from violence including physical, social, sexual and mental abuse. But when asked “Have you ever been subject to any forms of violence or harassment at school?” (Bih_3) 23.9% students said yes. This shows that students are facing inequity in safety and security and are vulnerable to violence in public schools of Rautahat.

Table 14 – Violence or harassment faced by students

| Bih_3 | | | | |
|-------|-------------------|---------|---------------|--------------------|
| | | Percent | Valid Percent | Cumulative Percent |
| Valid | No | 75.7 | 75.7 | 75.7 |
| | Prefer_not_to_say | .4 | .4 | 76.1 |
| | Yes | 23.9 | 23.9 | 100.0 |
| | Total | 100.0 | 100.0 | |

Source: Field Work, 2022

- d) **Language** – Multilingual policy was implemented with students being taught in the following language in the classroom (Cur_1).

Table 15 – Language used to teach students

| Cur_1 | | | |
|-------|-------------------------|---------|--------------------|
| | | Percent | Cumulative Percent |
| Valid | Bajika | 4.8 | 4.8 |
| | Bajika Nepali | 3.5 | 8.3 |
| | Bhojpuri | 22.2 | 30.4 |
| | Bhojpuri Nepali | 3.9 | 34.3 |
| | English | 1.3 | 35.7 |
| | English Bhojpuri | .9 | 36.5 |
| | English Nepali | 1.3 | 37.8 |
| | English Nepali Bhojpuri | .9 | 38.7 |
| | Maithali | .9 | 39.6 |
| | Nepali | 40.0 | 79.6 |
| | Nepali Bajika | 2.2 | 81.7 |
| | Nepali Bhojpuri | 9.1 | 90.9 |
| | Nepali Bhojpuri English | 2.2 | 93.0 |
| | Nepali English | 4.3 | 97.4 |
| | Nepali English Bhojpuri | 1.7 | 99.1 |
| | Nepali Maithali | .4 | 99.6 |
| Urdu | .4 | 100.0 | |
| Total | 100.0 | | |

Source: Field Work, 2022

Mother tongue-based (native language) multilingual education, an equity policy which uses native language in education as a medium of teaching and subject of instruction

by the act relating to compulsory and free education 2018. From the above figure 7.5 the variation in language tells us that students are being taught in their native languages. Bajjika, Bhojpuri, Nepali, English, Maithili and Urdu are the native languages being used by public schools.

4.3 Return of Investment in Equity

This chapter analyzes the return of investment in which it represents equity from the middle as mentioned in the literature review and methodology section.

- 1) **Language** – Multilingual education using native language has resulted in different languages being taught in the class. More than 50 % have preferred to be taught in Nepali.

Table 16 – Preferred language by Students

| Cur_2 | | | |
|-----------------------------|------------------------------|---------|--------------------|
| | | Percent | Cumulative Percent |
| Valid | Bajjika | 2.6 | 2.6 |
| | Bajjika Nepali | .4 | 3.0 |
| | Bhojpuri | 12.2 | 15.2 |
| | Bhojpuri English | .4 | 15.7 |
| | Bhojpuri Nepali | 2.2 | 17.8 |
| | Bhojpuri Nepali English | .4 | 18.3 |
| | English | 9.6 | 27.8 |
| | English Nepali | 1.7 | 29.6 |
| | English Nepali Bhojpuri Urdu | .4 | 30.0 |
| | Maithali | .4 | 30.4 |
| | Nepali | 50.4 | 80.9 |
| | Nepali Bajjika | .9 | 81.7 |
| | Nepali Bhojpuri | 4.3 | 86.1 |
| | Nepali Bhojpuri English | .4 | 86.5 |
| | Nepali English | 10.4 | 97.0 |
| | Nepali English Bajjika | .4 | 97.4 |
| | Nepali English Bhojpuri | .4 | 97.8 |
| | Nepali Urdu | .4 | 98.3 |
| | Urdu | .9 | 99.1 |
| | Urdu English | .4 | 99.6 |
| Urdu English Nepali Bajjika | .4 | 100.0 | |
| Total | 100.0 | | |

Source: Field Work, 2022

Remaining Students have preferred multiple languages, which is a huge investment for public schools. To acquire teachers who know multiple languages is itself a challenge in Yamuna Mai Rural Municipality. Instead of focusing on multiple languages, if the policy focused on using native language to help students understand Nepali and English, students would be able to compete in the local and

the global market. The current situation demands students to learn languages, which can be used in a large geographical area to compete and fulfill the demand of the current market.

Policy - From the table below the importance of mid-day meal and its satisfaction has been analyzed (**R_I_mdm** * **R_S_mdm**). Mid meal is extremely important with less “not at all important” and “slightly Important” responses by students with the majority of students satisfied with the meal.

Table 17 – Importance and Satisfaction of Mid Meal

| | | R_S_mdm | | | | | Total |
|---------|----------------------|------------------|----------------------|-----------|----------------------|--------------------|--------|
| | | Highly satisfied | Positively satisfied | Satisfied | Negatively satisfied | Highly unsatisfied | |
| R_I_mdm | Extremely important | 47.5% | 19.2% | 15.0% | 5.8% | 12.5% | 100.0% |
| | Very important | 9.6% | 41.5% | 24.5% | 19.1% | 5.3% | 100.0% |
| | Moderately important | 11.1% | | 44.4% | 44.4% | | 100.0% |
| | Slightly important | | | 50.0% | | 50.0% | 100.0% |
| | Not at all important | | | 40.0% | 20.0% | 40.0% | 100.0% |

Source: Field Work, 2022

Table 18 – Importance and Satisfaction of First Aid

| | | R_S_fa | | | | | Total |
|--------|----------------------|------------------|----------------------|-----------|----------------------|--------------------|--------|
| | | Highly satisfied | Positively satisfied | Satisfied | Negatively satisfied | Highly unsatisfied | |
| R_I_fa | Extremely important | 31.0% | 16.7% | 15.5% | 13.1% | 23.8% | 100.0% |
| | Very important | 2.5% | 36.4% | 22.9% | 25.4% | 12.7% | 100.0% |
| | Moderately important | | 18.2% | 50.0% | 9.1% | 22.7% | 100.0% |
| | Slightly important | | | | 100.0% | | 100.0% |
| | Not at all important | | | | | 100.0% | 100.0% |

Source: Field Work, 2022

From the above table even though first aid is extremely important according to the students 36.9% have responded negatively satisfied (13.1 %) and highly unsatisfied (23.8%). This shows that first aid needs to improve since students aren't satisfied by the first aid in the public schools. This shows the first aid policy has not been implemented well.

Table 19 – Importance and Satisfaction of Textbook

| | | R_S_text | | | | | Total |
|----------|----------------------|------------------|----------------------|-----------|----------------------|--------------------|--------|
| | | Highly satisfied | Positively satisfied | Satisfied | Negatively satisfied | Highly unsatisfied | |
| R_I_text | Extremely important | 69.9% | 19.9% | 4.4% | 5.1% | 0.7% | 100.0% |
| | Very important | 15.7% | 62.9% | 15.7% | 4.5% | 1.1% | 100.0% |
| | Moderately important | | 20.0% | 80.0% | | | 100.0% |

Source: Field Work, 2022

Textbook distribution is having the most importance and satisfaction which shows this program is implemented well. Equity and inequity in education can be viewed with three dimensions of equity from below, above and middle. These dimensions represent all the major parts of equity such as participation, rules and return of investment to diverse individuals according to their need. The following represent equity/inequity in education:

- 1) **Participation:** Measuring participation of students of different gender and religion provides data of diverse individuals. Level of participation measured in key to evaluate equity/inequity in education. As equity focuses on the need of people to identify the need of diverse individual participation is one of the major dimensions of equity.
- 2) **Policy:** For participation of all rules to initiate fair participation are needed, which are the policy framework of education in this study. Fairness which leads to social justice is one of the major concepts of equity. Education policies for participation such as teaching in a local language but with respect to global language or language covering a large area in the country. Since, in the current market people must meet diverse individuals, if he/she can understand a language covering a large area it will be easier to understand day to day concepts. Hence, strong policy is required to achieve equity and reduce inequity.
- 3) **Return in Investment:** To monitor participation and policy return of investment in ideas and resources any public organization must be evaluated. To check the success rate of equity programs in the community this dimension is essential. According to the success rate of equity programs changes in equity and its definition over time could be made to increase equity and reduce inequity. Thus, these findings can be put to conclusion as below:

Conclusion

This study concludes that equity in education can be viewed in three dimensions using Unterhalter's framework which is applicable to view equity at the micro level. The study is able to determine dimensions for inequity and inequality in education for public schools. The dimensions used in this study are interrelated, individualistic in nature, and represent equity in education in a broader sense.

The first dimension equity from below determines participation in terms of negotiation, discussion and questioning evaluating participation of different students in the classroom. Participation of students in class was determined by participation in question answer session, level of participation in class, shyness to raise hand for question answer session and eye contact with teacher while talking was compared with students of different religion and gender to identify inequity and equity. The second-dimension equity from above identified equity rules in public education by evaluating the availability of equity rules for scholarships, first aid, mid-day meal, multilingual language, and safety of students in public schools. Availability of equity rules for all students of different groups was evaluated from this dimension. The third-dimension equity from middle evaluated the importance and satisfaction of equity programs for scholarships, first aid, mid-day meal, multilingual language, and safety of students in public schools which checked whether the students are satisfied with equity programs according to its importance. This dimension was used to examine the return of investment of equity programs to determine equity/inequity in the implementation of the programs.

This study shows that in relation to every public school in Yamuna Mai Rural Municipality, the majority of students participated in question answer sessions with high availability of equity rules with the majority of students satisfied with equity programs. However, there are still some inequities that have been explored in this study in terms of participation such as shyness to raise a hand, lack of eye contact with teachers and lack of overall satisfaction in first aid(equity programs). To achieve equitable quality education these inequities must be addressed to obtain educational wellbeing.

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Annex

Survey Questionnaire

Ward no:

Name of the School:

| S.No. | Basic Information of Respondents |
|-------|----------------------------------|
| 1 | Name |
| 2 | Age |
| 3 | Sex |
| 4 | Grade |
| 5 | Ethnicity/Religion |

Resources

Rate on a scale of 1 to 5 the availability and satisfaction of the following resources:

Availability Highly Available (1), Available +ve (2), Available (3), Available -ve (4), Highly Unavailable (5)

Satisfaction Highly Satisfied (1), Satisfied +ve (2), Satisfied (3), Satisfied -ve (4), Highly Unsatisfied (5)

Importance Extremely important (1), Very Important (2), Moderately Important (3), Slightly Important (4), Not at all Important (5)

| S.No. | Resources | Availability | Satisfaction | Importance |
|-------|---------------------------|--------------|--------------|------------|
| 1 | Provision of mid-day meal | | | |
| 2 | First aid | | | |
| 3 | Textbooks | | | |
| 4 | Scholarship | | | |

Participation

1. Do you ask questions in class?
 - Yes
 - No
2. How often do you participate in the question/answer sessions?
 - Most of the time
 - About half the time
 - Some of the time
 - Seldom
 - Never.
3. How often do you feel shy to raise your hands in class?
 - Most of the time
 - About half the time
 - Some of the time
 - Seldom
 - Never
4. Do you make eye contact with the teachers while talking to them?
 - Always
 - Usually
 - About half the time
 - Seldom
 - Never

Curriculum

1. In what language is the curriculum being taught?
 - Bajjika
 - Nepali
 - Urdu
 - Bhojpuri
 - Maithili
 - English
2. Which language do you prefer being taught?
 - Bajjika
 - Nepali
 - Urdu
 - Bhojpuri
 - Maithili
 - English

Bodily integrity and health

1. Have you faced any kind of violence in your home as well as school? (Yes/No)

Funded by:

