

# REDUCTION OF INEQUALITY USING EMERGING TECHNOLOGIES

**Subarna Shakya<sup>1</sup>, Raisha Shrestha<sup>2</sup>**

Institute of Engineering, Tribhuvan University, Nepal  
E-mails: drss@ioe.edu.np<sup>1</sup>, engineer.rasu@gmail.com<sup>2</sup>

## Abstract

A number of inequalities such as gender inequality or difference between rich and poor exist in a number of Asian countries. There are institutions such as NGOs/INGOs exist in order to deal with these inequalities and reduce it. Most of the victims of inequalities don't have access to technologies. For this problem, an application (app) can be made where any person can report prevailing inequality seen in his/her village. In case of gender inequality, skills must be transferred to women for empowerment. It can also be done by use of free apps from where women can learn skills and share their knowledge and stories. Also data in NGOs/INGOs can be used to make a predictive system which shall ultimately predict the next inequality to take place at respective locations such that preventive measures can be taken. These kinds of app/software can be used by NGOs/INGOs to increase their efficiency.

## Introduction

In Asian countries we have a number of inequalities existing. A number of activities aiming to reduce inequality have been carried throughout the world.

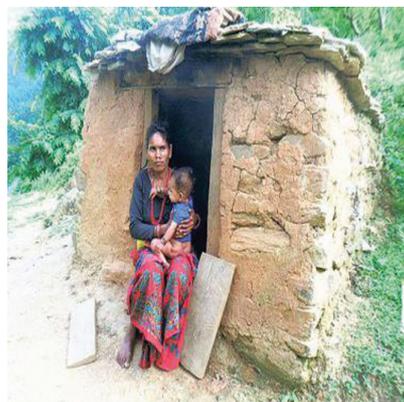
According to the Commitment to Reduce Inequality (CRI) index, six out of eight South Asian countries rank in the bottom 20 in terms of addressing inequalities. India is listed as a country which has bad performance in inequality reduction. Except Nepal and Maldives, remaining South Asian countries have scored even worse than India in this index as shown in Figure 1.

Inequalities such as differences between rich and poor, male and female

in a very severe form still exist in these Asian countries.

## Case study of Chhaupadi pratha in Nepal

Chhaupadi pratha is a tradition of untouchable practiced in western part of Nepal. Natural menstruation cycle of females is considered as a taboo in this region. As part of the Chhaupadi custom, women during her menstruation and post-natal state are forced to live in cowsheds, away from the home, exposing them to abuse as well as life-threatening risks (Figure 2). In this vulnerable time of month they are



**Figure 2: A woman in Chhaupadi hut during her period**

deprived to eat any kinds of dairy products which makes them prone to many health related attacks. In these areas 70–80% of women have uterus problem. Women also die of snake bites or suffocation in their Chhaupadi huts while on their periods. This Chhaupadi pratha had been outlawed by the Supreme Court in 2005 and had been criminalized in 2017. But still this tradition is practiced in mid and western areas of Nepal. *e-Kantipur* reported, on July 2017, a teenage girl died after she was bitten by a snake when she was sleeping in a cattle shed where she was forced to stay to practice Chhaupadi.

## Overview of inequalities in Sri Lanka

In Sri Lanka two major ethnic groups are present: Tamil and Sinhalese. There existed inequalities among them which eventually caused civil war which lasted from 1983 AD to 2009 AD. This civil war took a huge number of lives of innocent Sri Lankan citizens, Tamil rebels and Sri Lankan government armies. Two decades of armed conflict in the Northern and Eastern Provinces have caused not only loss of lives but also extensive displacement; and for survivors, lack of access to basic services, livelihoods and security. This civil war has effected Sri Lanka's economy, citizen's living, employment, education and many other sectors. There are a number of conflict affected families. There are children who are poor, disabled, civil war victims, child labourers, street children, displaced, migrant and refugee children. These children are unable to get education and other basic facilities for living.

## Role of NGOs and INGOs

Some inequalities prevailing in Nepal and Sri Lanka have been discussed above. Similarly number of inequalities are present in South Asian countries.

A number of NGOs/INGOs have been selflessly working to remove these inequalities and benefit the society.

Country	Rank
Nepal	81
Maldives	91
India	132
Sri Lanka	138
Pakistan	139
Bangladesh	141
Bhutan	143
Afghanistan	146

**Figure 1: CRI index of South Asian countries**

New laws for abolishment of immoral practices have been made. Amendments to constitution regarding existing inequalities have been done in favour of justice and equality.

Maiti Nepal, CWIN, Saathi, LACC Legal Aid and Consultancy Center, LOOM are some NGOs/INGOs in Nepal which are very actively working to remove inequalities and help victimized people to lead their life. Similarly there are a number of NGOs/INGOs in South Asian countries which have successfully helped and rescued a number of victims and locals. But still a number of local people who are victims of inequalities are unreachable. There are locals who are unaware of legal information and thus victimized. Locals just need to know that there are a number of helping hands available to help them and they just need to find them. As the locals are not able to reach the helping hands, these helping hands need to find out a solution to reach to these hidden victims.

#### A visit to NGO: LOOM Nepal

LOOM Nepal is an NGO which works at local and national levels. Its main goal is

to reduce gender-based inequality and fight for rights of women. It follows intersectionality approach, where the ultimate goal is reached by dividing task into multiple sections. One of the main sections of LOOM Nepal deals with is Internet and Sexuality. It is a very critical issue and deals with online harassment. There is no law for online harassment and the major challenge is to track the criminal activities and gather evidence.

One of the important tasks carried out by LOOM Nepal is that it has collected and documented stories of women's activism in a number of districts. A picture of one of the women who recorded her own story by her own words is shown in Figure 2.

In Nepal, women don't have much access to technology due to social, cultural and economic barriers. Women who have access to technology also have barriers such as fear of harassment.

A women activist, Ranju Danuwar's, word: *"We have very limited access to technology in my community but when I made that video by myself I felt powerful and confident."*

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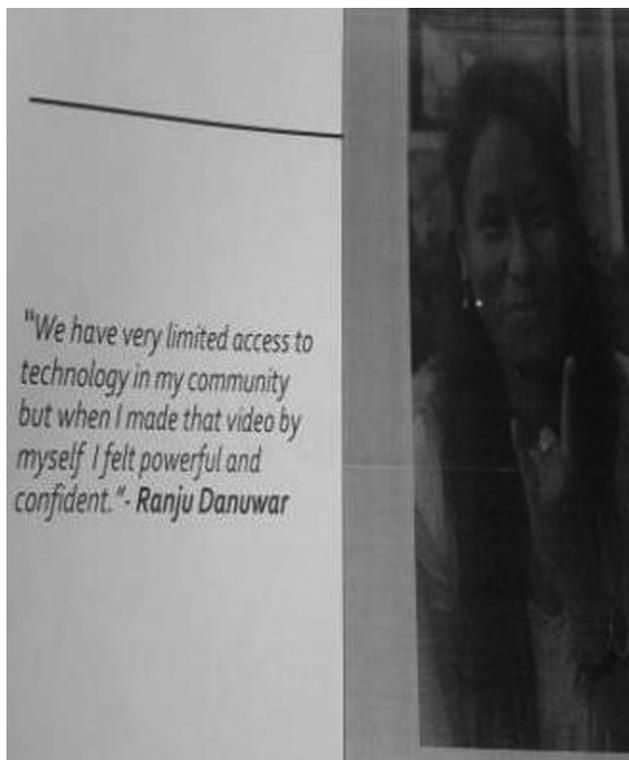
#### Easy access technology to find out the victims

National Women Commission in Nepal has launched a Toll-free Helpline, where any victim of gender-based violence can call and get information regarding the existing laws and advocacy.

We can find an app named "Mero Lagi" in app store which is targeted for all adolescent girls who have any queries regarding their monthly periods or any sexual queries regarding their health. This kind of app is very helpful to spread awareness among people.

Similarly we can make an app to find out the victims who need helping hands. An app where male/female can enter their details like gender, education, economic condition, family condition, condition of their village, whether has been victimized of any sort of inequality and so on. By use of this app a wide range of data can be collected. When an individual from a village gets access to this app, we can get information of their entire village. This information will help the NGOs/INGOs to track victim and reach them. A team can be sent to all the districts or parts of the country in a short period of time, the team can travel and teach the members of district regarding the use of app. The app should be in a language understandable by locals and user-friendly. As a single individual can give information about their village, anyone who sees inequality being practiced can report about it.

The legal information, updated laws regarding existing inequalities, can be placed in the app. Also name and contact details of advocates who deal with inequalities can be placed in the app. This information will help the locals and give them strength to fight back for justice and against inequality. Also few members in the district/village should be provided with some motivating factors (such as being paid) for giving the information of any kind of inequality existing in their area such that people will feel more responsible to report such activities.



**Figure 2: A women expressing her feelings after recording her story digitally on her own**

### Big Data usage by NGOs/INGOs

Big data refers to extremely large set of data which can be analyzed using statistical tools and techniques to identify the patterns of data, visualize data to understand the sequence or flow of data and so on.

Data science deals with Big Data. It uses statistical tools to make data analysis, data visualization effective.

Artificial intelligence is demonstrated by machines to act like humans by use of algorithms. Artificial intelligence can be used to make predictions based on the data available. In this case the past records of criminal/inequality activities can be used to predict next inequality activity along with the location. The system can also suggest prevention measures to be carried out.

There are big number of NGOs/INGOs working to bring out equality in nations. These organizations have plenty of data. There are several different kinds of organizations which deal with different kinds of inequalities. If all these data are fetched and given to the system, the system can use advanced technologies like data science and artificial intelligence to do proper analysis of data. These raw data can be processed to get useful information regarding inequality. Now, our system can actually predict the next criminal activity to be performed with the location at which it is prone to be performed.

The NGOs/INGOs can be much benefited by this modern-technology trend. If this kind of system will be used by NGOs/INGOs, then it will get predictions based on past record of criminal/inequality activities carried out. This will allow the enterprise to carry prevention activities like conduct awareness camps, survey camps, give training to the locals, give them proper information about existing laws and so on. As a result of prediction by the system, criminal activities can be prevented and public can be made aware of their rights and existing laws.

### Gender inequality in society and corporate world

We can find gender inequality in South Asian countries like Nepal, India, Bangladesh, Afghanistan and so on. In these countries gender inequality is a severe

issue. Once married, women, adolescents, girls are treated as property of husband's family. Their education stops there. Women are prone to be victims of rape, domestic violence, acid violence and so on. These kinds of violence lead women to live lifeless tortured life.

We just discussed about gender inequalities in developing countries. But it is a shocking fact how females are treated differently in developed countries as well. In any small, medium, large enterprise, whenever there is a female leader, employees don't take orders from their female boss. Their decisions are not respected and obeyed with good discipline. But the same orders when given by male boss or leaders is accepted happily by the employees. Male leaders are obeyed more than female leaders by the employees. Also we can see female staff being paid less than male staff for the same job. Despite the truth that women are equally capable to handle the corporate world and take business decisions, their decisions are not trusted and respected by the employees. This is a matter of shame for the entire society having such patriarchal thinking.

### From women to women (technology transfer)

For any women or girl being raised in a patriarchal society, it is difficult to go against the rules of the society and fight back for herself. As she has grown up seeing her father's worse treatment towards her mother, her strength, bravery are all killed. A girl in such society grows up with a feeling of curse for being born as a girl.

These girls should be given courage to fight for themselves. They lack self-defense training, confidence and knowledge.

A software can be made which can provide a platform for women to share their knowledge and skills. Empowered women can share their experience, skills, knowledge, stories which can play an important role in rising confidence of other women. Women should be given some training of skills such that they will be empowered which will give them confidence and independence. This training can be given through this application itself. Free videos and tutorials can be uploaded for women to learn easy skills. Ideas can be shared with women which will help them utilize

and boost their skills. It will help them earn money using the skills they already have like cooking, sewing, knitting and so on.

This kind of technology transfer app will help local women to increase their confidence and make them independent to lead their own living. Also when local women get to hear stories from other powerful, successful women, it will provide them strength to raise voice and fight against their problems. This will also let poor people learn skills to earn for their living.

### Conclusion and ways forward

A number of NGOs/INGOs are working to reduce inequality. In order to help them do their work we can propose user friendly applications. Android application can be built from which information regarding prevailing inequality can be made. But for this application to work efficiently, it should be made in a language understandable by local people. Also few members from each district should be paid for reporting inequality activity being conducted in the village. Only then information of people who don't have access to technology can be received.

Data of NGOs/INGOs can be used wisely to predict inequalities to take place in future and suggest predictive measures. Also knowledge can be transferred from women to women using android applications. These kinds of software can be used by NGOs/INGOs to increase their work efficiency. For success of these applications, it should be made sure that victims somehow get access to these technologies and understand the terms used in these applications.

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