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# Deforestation: Project Of An Educational Intervention

## Introduction And Background

Deforestation is defined as legal and illegal cutting of forest or trees. Both natural process and artificial activities can lead to deforestation that affects wildlife, ecosystems, climate and weather pattern. The issue has been reported globally have been protesting against such uncontrollable cutting of forest since last fifty years. To understand the number of the issue, it is imperative to focus attention on some global facts and figure. Forest's cover nearly 30% of earths land but it is dissipating at an alarming rate. In between 1996 and 2016, nearly 502,000 square miles equivalent to 1.3 million square kilometer of forest have been disappeared from earth surface as per World Bank. The area is larger than South Africa. In a report of 2015 published in journal Nature nearly 46% of trees have been felled. In last 50 years, nearly 17 percent of Amazon forest cover has been lost and the loss is increasing ever-increasing (Curtis et al., 2018).

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## Deforestation And Sustainability Issues

Globally each country has recognized the importance of environmental management and development of sustainable solutions especially in context of deforestation. There are many factors that can be considered as a responsible for the same – coordination problems, limitation of environmental policies on deforestation, Limited public awareness and limited public participation, inadequate mainstreaming of deforestation issues into other programs and poor addressing of social issues (Stanturf, 2017).

Apart from above factors there are multiple factors that also affects the deforestation rate globally. The factors are inclusive of social, economic, political, and environmental.. In particular causative factors, links and underlying causes are neither linear nor single or isolated. For example economic growth can act as a positive factor preventing deforestation and a negative factor that facilitates deforestation. For example – negative factors includes more investment in forest frontier areas that result in intrusion into forest area by the farmers and other individuals who are dependent on forest for natural resources and source of income. The positive side effect of economic development is they can develop other economic sectors that can prevent individuals from venturing into forest areas for occupation and earning. Similarly, governance, political interest and industrial interest are some of the factors that impacts on deforestation process (Panayotou, 2016).

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## Environmental And Educational Goals

The current project have two objectives – educational objectives and environmental objectives.

Most of the times common people are not aware of their indirect contribution towards deforestation. Common individuals have a misconception that, deforestation is a broader issue and can be addressed through government initiatives and stringent policies. But, the factors such as use of more wood products and use of more papers, more furniture interiors at home increases the demand of forest products. This in turn results in increasing pressure on the companies and manufacturers. As a result, deforestation come into existence. The deforestation issue need to be realized at individual level to take steps towards prevention. Educational goal of the project: The educational goal of this project is improving the awareness towards deforestation and dissemination of knowledge regarding strategies of deforestation prevention (Chapman et al., 2016).

### Environmental goal

The environmental goal of the current project is reduction in deforestation rate, maintaining balance in atmosphere in context of carbon-dioxide concentration, and soil erosion prevention.

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## Methods And Procedures

The current project is an educational intervention that implicates, the educational intervention must be provided to a group of people. Due to ease of access and sampling the sample subjects comprises of family members, friends and local resident neighbours equaling to 30 in numbers.

## Participants Of This Project

Participants Numbers Mean Age Min. Education Employment Status Marital Status

Employed Unemployed Married Single.

Male 9 37 Year 12 5 14 6

Female 5 31 Year 12 4 6 7 3

As mentioned above the above socio-demographic chart implicates the male members in the group is higher as compared to female members and the average mean age group of male member is higher as compared to female group. Since, random sampling has been done to reduce the bias and obtain better results such differences can be observed. The segregation of employment and unemployment was done to understand whether employment status has any

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connection with deforestation prevention.

The participation was carried out in a normal door to door approach where a printed handout was given to the members (especially family member, friends, and other neighborhood residents). The informed consent was asked to send through mail in order to participate in the research. Prior to that each member has access to internet and mail was also confirmed.

## **Project Setting**

Project is divided into three stages- the pre-education survey to be handed out, the education session to be conducted for an hour and thirdly conducting the survey to see the increase in knowledge and knowing their future strategy towards deforestation prevention.

The questions to be given pre-educational session knowledge evaluation.

- a) How forest impact their daily life?
- b) What do you think how much forest have been lost in last 50 years?
- c) Definition of deforestation.
- d) How deforestation occurs?
- e) What is greenhouse gas emission?
- f) Can you name three main sources of greenhouse gas emission?
- g) How we can reduce deforestation?

The same question will be asked post-education session that will be conducted in a hall in one of the resident house (with permission). The education intervention involves educating the participants about deforestation, the causal factor, and the human and social factors that contribute towards deforestation and what strategies they can follow to contribute towards prevention of deforestation. During the education session, the doubts of the participants are cleared too. Post doubt, the same set of questions were put to evaluate what they have learnt and how their knowledge regarding deforestation has increased and whether the educational goal has been achieved or not.

## **Participants Behaviour**

During the project, the participants displayed a range of attitude that acted both as facilitator and barrier to the issue. The facilitator of the project goals includes their curiosity to know how they contribute towards deforestation and they have the potential to prevent deforestation at local and individual level. The barrier was, their denial of the fact that they were too responsible for this global issue as doesn't understand how it creates demand in the market and that in turn put pressure on forest cover. The participants were ready to help in addressing the issue once they are aware of the fact that each day how much forest the earth loses and how it is going to affect their future generations.

## **Educational Strategy**

The educational intervention was targeted not only to improve knowledge and awareness regarding deforestation but also a change in their behaviour towards the environment or nature. Therefore the educational session will incorporate the Theory of Planned Behaviour Change in

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order to bring positive changes among the participants.

The theory of planned behaviour assumes that the intention of an individual largely gets reflected in his personality, attitude and intention towards a particular act. For example, whether the participants are aware of deforestation and their role in the prevention or not can be assessed by assessing their views on deforestation and role they want to play. The second assumption is that the individuals tend to act or behave in the way that is predominant in nature or society. Therefore, presenting them how different countries and their population are taking steps towards deforestation control and how they are changing deforestation afforestation might have positive impacts on their future behaviour. Lastly, the model assumes that, the resulting behaviours or outcomes of planned behaviour change depends on perceived control of ones behaviour through internal and external factor. Internal control is about own behavioral control over use of paper, recycled products, planting trees, spreading awareness and less use of paper. The external factor is about what external people expect in this regard, that might influence the behaviour (Robb, 2017).

## **Post-Education Strategies Outline**

Post educational session, a group discussion will be held to assess how the individuals think they are contributing to global deforestation at local level and what they can do to prevent deforestation at their own level. The use of the theory of planned behaviour model was to evaluate the intentions of the participants and through knowledge modifying their behaviour towards deforestation. It is not feasible, to ask them completely stop using tree based products or forest based products especially which are not for medicinal or edible use. But, when they will realize through education, how their behaviour and intentions towards a particular objective is contributing towards a particular global issue, they might think to modify their behaviour and perceived thinking. Thus, this model act as a facilitator of achieving the educational goal set for the project.

## **Outline Of Strategies**

The participant's intentions are assessed as well as knowledge through the questions given above. The questions are collected and simple statistics are done to find out what is their knowledge and view about deforestation? Without any bias, the next step was delivering a 20-25 minute session on deforestation through a pictorial presentation of deforestation and how it impacts on our planet. The power-point presentation also comprises of local areas deforestation facts and figures. Once, the presentation is complete the next step is a clarification of doubts and group discussion regarding the issue and participants thoughts on the issue. In group discussion randomly 7 -10 participants are asked to share their views. The pre-educational survey questions are again given for re-assessment of their behaviour, intentions and knowledge towards deforestation.

## **Results And Discussions**

The educational intervention data collected through pre and post educational survey is subjected to simple statistics as mentioned and the data comprises of

- a) Pre-education deforestation knowledge, and post-education deforestation knowledge.

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- b) Acknowledgement that they are responsible in some-way for contributing towards deforestation.
  - c) Realisation that their behavioural change can bring the necessary change
  - d) Steps taken earlier perceiving deforestation as a major environmental challenge
  - e) Will be taking steps to prevent deforestation as per the mentoring or guidance.

The frequency chart for each of the above criteria is given in appendix section.

The study result found, the educational session had a positive impact on their deforestation knowledge, their perceived behaviour and change required. The participants expressed both pleasure and sorrow as they gained relevant information regarding deforestation, but unhappy over the fact that their low realisation has also contributed to global issue. The study participants expressed they have a social responsibility towards protection of nature. There seems a variation in their intent towards prevention. This variation can be attributed to difference in their perception towards the issue, realisation of social responsibility and perception towards own behavioral factors. For example – each participant agreed to use paper but the extent of use of paper may differ in this section that might impact on their perception.

The success criteria of the project is the evaluation of the knowledge and steps they will be taking to control deforestation. The pre and post-education survey demonstrated significant improvement in understanding the issue and their future strategies to address the problem.

The current project helped me in various ways that will be helpful in designing projects for future targets. Firstly, the educational projects alone cannot bring the necessary change it has to be integrated with the psycho-social or cognitive behavioural models to understand your audience and target behaviour. Secondly, the education has to be more practical in delivery and must be attached to real life than theoretical if a community change is expected from the projects. In my future projects, more deep study of my audience must be carried out to find out their behaviour and interactions with the nature and the human activities in that region which either impact positively or negatively to the environment.

## Conclusion

The current educational intervention seemed to achieve the educational goals set in the program.

## References:

1. Chapman, C. A., DeLuycker, A., Reyna-Hurtado, R. A., Serio-Silva, J. C., Smith, T. B., Strier, K. B., & Goldberg, T. L. (2016). Safeguarding biodiversity: what is perceived as working, according to the conservation community?. *Oryx*, 50(2), 302-307.
2. Curtis, P. G., Slay, C. M., Harris, N. L., Tyukavina, A., & Hansen, M. C. (2018). Classifying drivers of global forest loss. *Science*, 361(6407), 1108-1111.
3. Panayotou, T. (2016). Economic growth and the environment. *The environment in anthropology*, 140-148.