

## **A study on Problems and Challenges faced by People due to Uma Oya water Multi-Purpose Development Project (UMDP) in Badulla district**

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**Abstract,** *The study mainly focused on Problems and challenges faced by people due to Uma Oya water Multi – Purpose development project in the division of Bandarawela in Badulla District. The main objective of the study was to examine the problems and challenges faced by people due to the project. The sub objectives were; to identify the environmental impact of Uma Oya water project, to examine its' Socio cultural impact, to determine Psychological problems faced by the affected people during Uma Oya water project and to provide social work intervention for the Uma Oya water project. Interviews were conducted with a sample of 40 respondents who were affected by Uma Oya water Multi-purpose development Project. It was found that most of the people's houses and agricultural activities were in the area affected by the development. As a result of the project, economic, social and cultural backgrounds collapsed in the area. 80% of the respondents were found to suffer from water shortages, 80% of their agricultural fields were totally destroyed. In addition to this most of the houses suffered subsidence and 75% of them had cracks. At the time of the research new cracks were appearing in houses. Most of the water resources wells, spring water systems, climate system were affected by the development. In addition to this the development has led to a loss of bio diversity and geographical instability. These issues mainly affect the life styles of the people and further issues are arising day by day. The sample population of the study was selected from the population of the most affected area from the uma oya water project .The sampling method of this study was selected purposive sampling method. A purposive sampling method is non-random sample that selects respondents based on their characteristics and the objectives of the study. In this study qualitative and quantitative method (mix methods) were used when collecting data. Data was gathered using questionnaires and interviews and analysis was carried out using SPSS.*

**Keyword:** *Uma Oya water Multi-Purpose development project, Development refugees, Environmental impacts*

## **Introduction**

The Researcher selected this project to understand the parties that are responsible for getting environmental recodes and complying with them. The aim of this research is to discuss environmental and social impacts of Uma Oya multipurpose development project and to debrief how mistakes from the past can be rectified for better implementation of such projects in future. While acknowledging the vast benefits that can be derived from such mega scale projects, the discussion details the negative impacts, too, in order that these issues are lessened. This is so that mega development constructions can be utilized as a positive development objective without hampering the well-being of the society, environment, and their interrelations.

The Uma Oya multi-purpose development project was started on 29/04/2008. This project was proposed to transfer water from Uma Oya to Kirindi Oya in order to develop hydropower and to irrigate the dry and less developed Southern region of Sri Lanka. It was expected that this project could provide water to the Hambantota Port, Weerawila International Airport and Hambantota Industrial zone as well. Since then up to now, the constructions have been going on for more than 8 years. Though more than half of the project has been constructed, it has with a significant environmental, economic and social impact which

has affected the community and environment negatively.

The imperial powers that colonized Sri Lanka deliberately caused annoying afflictions to the people and to the natural environment to fulfill their indecent aims and objectives. They ravaged stupas,(Pagoda) shrines, temples and shelters of the people, killed fruit trees and cattle and caused irreversible damage to the forests, streams, springs, rivulets, brooks, runnels, rivers and tanks. By introducing legislation such as Barren Lands Ordinance they acquired lands of the national people coercively and acquired valuable environmentally sensitive lands for economic plantations. When they departed the country it was endowed to the native governors to country these were endowed to the native governors to continue the destruction. They have made away with the water springs, mountains and other natural resources and have created thousands and thousands of development refugees.

## **Objectives**

The main objective of this study is to examine problems and challenges faced by affected people during the Uma Oya project. This will mainly discuss Economic, environmental, psychological, socio cultural problems. The Sub Objectives are to examine Socio cultural impacts of the Uma Oya project, to identify the environmental impact of the Uma Oya project, to determine psychosocial

problems faced by the affected people and to provide social work interventions to them.

### **Research Problem**

It is undeniable that the development of the economy has brought great changes in everyone's life and significantly elevated our living standards. Some people therefore argue that the development of economy must come before everything else. Others believe that under no circumstances we should seek temporary economic development at the expense of the environment and resources. If we do so, we could never achieve sustainable development of economy, and such a practice is not in accordance with human welfare. If the government neglects the importance of environmental protection when promoting the economic development, it could make a profit in the short term but suffer a larger loss in the long run.

Sustainable development is a pattern of economic growth in which the use of resources aims to meet human needs while preserving the environment, so that those needs can be met not only in the present, but also for generations to come.

Development projects are needed in developing countries such as Sri Lanka but those developments should be done only with the reconciliation of environmental protection and social well-being of the people. The government cannot improve people's lives through developing the economy at

the expense of environment and natural resources

### **Study Area**

The concept of intragenerational equity requires equity within the generation. The natural resources of the country should be equitably distributed among the people of the country. It is said, that among the existing generation also the natural resources should be equitably distributed. By implementing this project the government has sought to generate intra generational equity by giving access to the water resources to the people in Southern areas. But it has been a challenge for the future and inter-generational equity. Briefly consider about the most affected area. This is Bandarawela. Within Bandarawela the most affected villages are Hil oya, Makullella, Weheragala, Thantiriya, Kinigama, Walasbadda, and Udaperuwa. The most significant area to consider Udapeuwa as most damages are there. In this study the main focus will be on this village because lots of subsidence and other various kinds of damages have happened in the area.

### **Rational of the Study**

The vegetable production of Badulla District is 38% out of the hill country's total vegetable production. Out of it 35% of vegetable production occurs in the Uma Oya valley. The abuses and afflictions caused by the dam project are caused to such a valuable area. Even though physical development is an

essential element of the lives of the people, so called development should not be done by abusing something, making others starve, making other areas become dry and by destroying streams, rivers, forests and nature.

At present, the water of Uma Oya has been accumulated in the Rantembe reservoir and diverted to Mahaweli C and Mahaweli B zones including Aralaganwila according to Mahaweli Master Plan. The Mahaweli project which was created in 1960 sought to obtain 45 millions of Cubic meters of waters from Uma Oya only in the months of June, July and August. Hence, a further diversion of water to the South of the country could result a serious water shortage in Mahaweli C and B zones. This project could endanger an already developed area in the aim of solving the water crisis of another area. It will then be essential to provide water to meet the demand of water in Mahaweli C and B zones by implementing another irrigation project expending huge amounts of funds.

Further to this backdrop the project is carrying out in almost beautiful area in the country which has attracted the eye of the tourists due to its natural beauty and cool climes. Up country is the heart of Sri Lanka and now the heart is gradually getting perforated. The water streams of the area are drying up, ground water is falling off and the wet ground for the animals is disappearing and gradually becoming a desert. The beautiful scenic areas such as Bandarawela, Ella, NuwaraEliya, Diyatalawa,

Welimada, Haputhale are dragged in to a dangerous destiny and becoming sterile areas.

This project has created a number of Economic, social, environmental problems that have contributed to the economic and emotional deprivation of the people in this area. Therefore, it is necessary to minimize the Economic, psychological, cultural and environmental degradation in implementing these kinds of projects. The researcher selected this project to understand the parties that are responsible for getting environmental records and complying with them.

### **Research findings**

Adverse Effects of the Project on the Residents in the area of the Uma Oya mega project have already caused enormous health, hygiene and livelihood problems to sections of people in Uva, especially in Bandarawela, Badulla areas. Lots of drinking water wells and even some waterfalls have gone dry in these areas. It is true that the Uma Oya project will help to cultivate more lands in Wellassa, and it will generate hydroelectricity, but adverse effects on the people need to be given high consideration. The main issue that has occurred since the inception of this project is the violation of the fundamental rights of the people living in the areas affected by the project. Displacement, loss of livelihood, violations of fundamental human rights and land dispossession are some of visible socio-economic impacts the

residents of those areas are facing. Cave-ins and subsidence have impacted on the houses of the population and they have become places where people cannot live. At the same time there are potential health impacts to the residents including accidents, mental problems including stress, depression and suicide, occupational diseases and accidents. The residents of these areas have been unable to cultivate paddy rice and vegetables due to the drying of water springs since 2014. Landslides and stone quarry deterioration have also been some of the results of the project. Apart from that, the noise pollution in those areas can affect the hearing ability of people and causes disturbance to the education of the children.

The impacts of the project are suffered by people in three areas. These include the people who are directly displaced, people who live in the area downstream of Uma Oya who will suffer water shortages and the people who are living in the areas where the earth will be made unstable due to the tunneling process. People claim that their wells have dried up and turned into dry holes in the surrounding areas of the Uma Oya, these have never dried up in the past 50 years. A larger number of wells have recorded a reduction in their water levels, and no water can be found underground. All this while at the same time their houses are being damaged by the contraction process of the project and they live in fear of landslides. Not only houses, but all other social infrastructure such as schools and places of worship, are continuing to crumble,

while agricultural lands, the lifeblood of the communities, have become only sites of despair.

**Table No 1: Number of damaged houses in some Village Officers (Gramaniladari) divisions**

|   | GS Division | Total number of families in the GS Division | Number of damaged houses |
|---|-------------|---|--------------------------|
| 1 | Udaperuwa   | 530   | 504                      |
| 2 | Makul Ella  | 569   | 533                      |
| 3 | Egodagama   | 525   | 432                      |
| 4 | Weheragala  | 480   | 448                      |
| 5 | Kinigama    | 564   | 70                       |
| 6 | Thanthiriya | 635   | 123                      |
|   | Total       | 3303  | 2110                     |

**Source: Serve data 2018**

According to above data researcher identified most damages happen in Udaperuwa GN division that's why with the help of purposive sampling method select Udaperuwa GN division for the study. In this study area researcher gathered following data.

Table number 2: The numbers of 653 Wells dried are in these areas (Source: Serve data 2018)

|   | Areas       | Number of wells |
|---|-------------|-----------------|
| 1 | Udaperuwa   | 173             |
| 2 | Makul Ella  | 194             |
| 3 | Egodagama   | 70              |
| 4 | Weheragala  | 154             |
| 5 | Kinigama    | 8               |
| 6 | Thanthiriya | 54              |
|   | Total       | 653             |

### Major income sources before and after project.

The Researcher identified the major sources of income in this area before the Uma Oya project disaster. According to the geographical location and climatic system most of the people were engaged in agricultural activities such as paddy rice growing, vegetables and gardening. According to the data 80% of people were engaged in agriculture activities. In ancient times they practiced agriculture as a major income source. This is clearly shown in pie chart. 10% of the remaining population 10% government workers 8% were private workers and 2% of people worked for a daily wage.

The researcher was not able to identify significant differences of in sources of income. Before the Uma Oya project most people engaging agricultural activities with the help of geographical location and climate system. During the Uma Oya project lot of

damage was caused to the environment. Thousands of acres of agricultural lands have become unusable. Each and every water resource dried up, and lots of subsidence and cracks occurred in their agricultural lands. Therefore they were required to move to another source of income. At that time they faced a lot of problems because in ancient time they practiced agricultural activities as their major source of income. As one of the negative impacts of the Uma Oya project they were forced to move to the other sources of income.

Then after the disaster (after the project)

agricultural work was decreased. Now only 28% of the agricultural works are there when compared to the case before the project. Most of the agricultural work available is now only available as daily wage activities. 50% of the populations are now engaged in daily wage activities. Some people have managed to move to into the private and government sectors.

According to the information about who was living in area affected by the project, their cultural background their value system all of the things collapsed. In traditional livelihood times they practice agricultural activities. They take consumed vegetables and other food stuffs from their garden. They had a self-sustaining economy. They never had to go to markets to buy vegetables as they were depending on their own agriculture. Significantly now the entire process has been changed due to most of the agricultural land being destroyed. Now most of the famers are doing daily wages activities, they may be far away when they are needed to help

with problems faced by the family. There will be no protection for their family and family problems will be increasing.

### **Health and sanitary problems**

The other significant impact of the Uma Oya project is that people happen to face lot of health issues and sanitary problems Due to the lack of water as a result of the project they don't have enough water facilities for their day to day activities. The researcher could be able to highlight these issues according to the data shown previously. 35% of people now suffer from health issues such as continuously suffering from diseases due to the water. 10% of the populations suffer from sanitary problems as they don't have proper water systems for daily activities. 55% of the population faces other problems for gardening and agricultural work.

### **Nature of diseases before and after the project**

The researcher found that, spread of diseases before the (project) disaster Was different to now. Fever 45%, 15% dehydration, 12% skin diseases, 28% other diseases. These diseases were found to spreading because of the climatic system and agricultural patens (fever caused by climatic system, skin diseases cause for by agricultural works) After the disaster all of the issues increased. The percentage of people suffering from skin diseases and dehydration increased, because of the water problems. Most people now don't have clean drinking water and also they don't have proper water system for day today activities.

### **Psychosocial problem**

According to all the statistics in this area all the things were collapsed. Their major income patens collapsed, houses were damaged lots of subsidence happened and health problems are numerous. People suffer lot with these problems. As a result 60% Of people were found to be suffering from stress and 10% were found to have attempted suicide. 5% of the population had died because of these kinds of problems.

### **Subjections**

Sri Lanka has experienced many development projects within the recent past. But when analyzing Sri Lankan development process in terms of multipurpose developing projects it is reflecting Sri Lanka's incapacity for sustainable development. Being a developing country Sri Lanka should not bear a totally dismissive approach to mega development projects. Instead it should seek to minimize or eliminate the adverse impacts of mega projects by careful planning and designing. At the same time the lessons from past mistakes should be taken as good examples for future development projects by practicing eco-friendly development mechanisms. Finally, the Researcher makes the following recommendations for upcoming development projects in Sri Lanka.

A more detailed study should be carried out to come to a definitive conclusion on the economic and environmental feasibility of mega projects without

rushing to conclusions with inconclusive technical evidence.

The decision makers should adhere to the well-defined laws and regulations in the country.

Public participation in terms of professional hearing for the major projects should be made compulsory.

Preparation of EIA reports should not be limited to local specialists but foreign firms should be invited for this purpose as well. It may be argued that the amount which has to be paid for foreign EIA Reports is high, but it should be noted that the sums which have to be spent to repair the economic and social damages following poor project implementations is far higher than this. This step will encourage precautionary approach as well.

For major developments projects especially multi-purpose projects in Sri Lanka; the Project Approving Agency should be Parliament.

Strict conditions should be imposed while implementing such projects; for instance, the cutting down of trees to implement the project should be reduced to a maximum of 2% and none of the streams should be left without cover.

The mega development projects should be carried out within the sphere of sustainable development. Mere development will not achieve proper development in any country, development and

sustainable development should be parallel aims line which should not override each other.

It is not possible to control environmental pollution effectively by only applying sustainable development concepts and statutory laws. It is also not possible for the National Environmental Authority to control pollution without the active participation of people. Active participation of the people in the process of implementing national programs on conservation of environment is absolutely necessary.

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