Beneficiary Participation in Formulating Social Safeguard Management Programmes – Experience from Dam Safety and Water Resources Planning Project of Sri Lanka

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Abstract: The Social Safeguard Management Programme (SSMP) has become a key component of irrigation related rehabilitation projects. This paper reviews a renewed approach to developing SSMP that has been adopted in the rehabilitation of four reservoirs coming under the DSWRPP, where water releases had to be suspended temporarily to enable the rehabilitation. The SSMP has been designed in such a way that livelihood support assistance is provided to 8,344 affected families in the downstream communities. The conduct of Social Impact Assessment and the development of Livelihood Support Assistance (LSA) plans are illustrated. The LSA plan has four sub plans namely Wage Assistance Plan, Alternative Crops Plan, Domestic Water Use Plan and Gender Action Plan. The affected people have contributed to the economy by working in the rehabilitation work and saving foreign exchange by cultivating alternative crops. The paper presents ample evidence of the level of contentment and happiness of the farmers at the end of the programme, they being made responsible for the development and implementation of the LSA plans. The main argument offered in this article is that the programmes to assess and mitigate socio-economic impacts should primarily take into account the perspectives of the people without exclusively relying on specialists or technocrats.

Keywords: Social safeguard management programme, Livelihood support assistance plan, Dam rehabilitation, Beneficiary participation.

1. Introduction

Sri Lanka is an island in the Indian Ocean with an extent of 65,525 sq km and having 103 river basins. The population of Sri Lanka is about 21 million and over 75 per cent of the country’s population lives in rural areas. About 33 per cent of the population is engaged in agriculture based employment. Annual rainfall varies from 900 mm to 6000 mm with the higher values experienced on the eastern slopes of the central hilly areas. Sri Lanka has two wind regimes, where Southwest monsoon prevails from May to July, and Northeast monsoon from November to February.

Sri Lankan hydraulic heritage goes back to sixth century BC, where many dam engineering achievements were made to store water for agricultural development (Karunaratne, 2003). Water resources development accomplished through dams and storage reservoirs is an integral part of the rural development in the dry zone of Sri Lanka. The country has around four-hundred medium and large dams/reservoirs in operation. Out of which, 80 dams are classified as large dams according to the guidelines of the International Commission on Large Dams (ICOLD). While some of these dams/reservoirs are more than thousand years old, around 10 are relatively new having being built in the 20th century. As of present, most of the old dams are experiencing various
structural deficiencies and shortcomings related to their operation and monitoring facilities thus, posing a threat to public safety.

In the twentieth century, large dams and other development projects were often associated with the progress and economic development of many countries, including India (Khagram, 2005). The Dam Safety and Water Resources Planning Project (DSWRPP) was commissioned in August 2008 under the auspices of the Ministry of Irrigation and Water Resources Management with financial assistance of the International Development Agency (IDA) of the World Bank. The objective of the DSWRPP is to improve the development and the management of water resources within the country, reduce water induced hazards to public, and enhance effectiveness of water related investments (DSWRPP, 2008). The Dam Safety and Operational Efficiency Improvement is one of the main components of the project, intended to address critical issues identified and ensure structural, hydraulic and operational safety of 80 large dams. Accordingly, 32 large dams which are of high risk to public safety are to be fully rehabilitated and the remaining 48 dams are to be provided with basic safety facilities. It is believed that with the completion of remedial works, the life spans of the dams are estimated to increase by another 50 years. This would ensure the safety of the lives and the properties of thousands of people who are living downstreams of these dams/reservoirs.

Based on the nature of the remedial works involved and the severity of their impact to the affected communities, the dams have been classified into four categories as follows:

i. Those in which the remedial measures could be undertaken without obstructions to the water releases or where alternative arrangements could be made to ensure uninterrupted water releases.

ii. Those which have direct agriculture under their command but the nature of remedial measures do not require suspension of release of water to the users for prolonged periods.

iii. Those which have direct agriculture under their command and the nature of remedial measures do require suspension of release of water to the users for prolonged periods.

iv. Those which serve multiple command areas of which the radius of influence extends beyond the immediate agricultural command area and also to a number of other distant and hydraulically interconnected command areas.

In accordance with the above classification, 28 dams fell into the categories i & ii, and only 04 dams/reservoirs (Tabbowa, Ridiyagama, Nachchaduwa and Usgala-Siyambalangamuwa) fell into category iii. The rehabilitation work of these four tanks necessitated the complete emptying of the tanks making the farmers forgo the cultivations in the Yala Season.

According to the guidelines of the DSWRPP, it was necessary to implement a Social Safeguard Management Programme (SSMP) for dams that came under category iii. Due to the interruption of water in these four reservoirs, primary means of livelihood of over nine-thousand families were to get affected as they were dependent on irrigated agriculture. Moreover, the communities that lived downstream were reliant on the tanks for a number of daily necessities to which simple alternatives just did not exist. The implication of this was that the DSWRPP had to bear the added responsibility of finding a solution to these socio-economic issues which necessitated the implementation of the SSMPs.

With a typical SSMP, one of the difficulties project-affected people could encounter is the difficulty in getting back to the original livelihood after being on a livelihood support assistance programme that had been purely based on compensation. The SSMP was designed by the DSWRPP in such a manner that it provided livelihood support assistance which is not based on compensation but enabled them to go back to their original livelihood without a difficulty. The SSMP represented an improvement from the typical compensation procedure in a substantial and creative manner. The primary purpose of this research paper is to highlight these
improvements and draw attention to the innovative design adopted for surmounting various obstacles by providing an adequate overview to the main components. Secondly, it demonstrates how this innovative approach helped to bring about an end result that is substantially different from the traditional outcomes of similar programmes. Thirdly, it seeks to present a critique of the various policies of social safeguard management on the basis that frameworks for such policies should stem from the needs of the people and the societies. This is not simply to emphasize that policy making should be sensitive to the needs of the people; while this is certainly true, the paper takes a step further to contend that most desirable ideas for impact assessment and mitigation should stem from the people themselves. As such, the communication among all stakeholders should form a continuous dialogue throughout the duration of the programme with due emphasis being given to the views of the people. What is highlighted here is the extensive involvement of the people as the primary stakeholders of the project, in developing the SSMP, from the design phase to the implementation phase.

2. Overview of Social Safeguard Management Programme

The history of social safeguard management has its beginnings in the development programmes initiated by the United States in the 1970s, which subsequently spread throughout Britain and much of the Western Europe. Subsequently, international organizations such as the World Bank, the Japanese International Corporation (JICA) and the Asian Development Bank (ADB) employed the SSMPs in the development programmes undertaken in developing countries. Since the people of those countries are less capable of withstanding hardships caused as a consequence to development programmes, SSMPs have been made an integral component of such programmes.

As the first step of the Programme, before proceeding with any analysis, it is necessary to create awareness among the members of the community of the project methodology and theoretical framework, and underlying values of the programme. The preceding sections emphasized the value of integrating the views of the community to the programme so that the solutions proposed are pragmatic and in their favour. According to the report on Options for Integrated Safeguards Systems published by the African Development Bank Group (ADBG), issues concerning indigenous people are addressed by integrating a number of essential social safeguard principles, such as: the consideration of community impacts, vulnerable groups (including minorities, women, indigenous people and cultural heritage, adoption of free, prior and informed consultation, and establishment, at the project level, of genuine grievance and redress mechanisms (ADBG, 2012).

The people in the developing countries such as Sri Lanka, however, continued to be dependent upon the mitigation and compensation oriented measures that the government provided when the development programmes naturally entailed negative impacts. In these approaches, provisions for the active participation of the people in the development programmes, as the ultimate beneficiaries of such programmes are not included. As a result, affected people may get distanced from the development programmes and consequently valuable knowledge and contribution which they could have offered for the betterment of the projects would not be available.

3. Social Impact Assessment

The philosophy behind the SSMP of the rehabilitation projects of the DSWRPP is to arouse the interest of the people in the outcome of development programmes and to use their inputs rather than making them stand by as passive recipients of social welfare. In order to achieve this goal it was necessary to instil into the people the significance of rehabilitating the dam that had been supporting their livelihood for generations and to rekindle the cultural heritage associated with the tanks. The achievement of this goal was an uphill task and the failure to do so would have hampered the comprehensive campaign of Information, Education and Communication (IEC) aimed at communicating relevant issues to the community. For each rehabilitation
project, a support organization was established which constituted a multidisciplinary team capable of implementing the SSMP in the field to work in tandem with the community. Each team was introduced to the respective community and the representatives of stakeholder agencies in order to build connections and interrelationships. The stakeholder agencies participated are the Department of Irrigation, Department of Agrarian Services and Irrigation Management Division.

The support organizations comprised Livelihood Support Facilitators (LSF) to execute the programme at the grass root levels. The LSFs were recruited from among the village youth after interviewing them on the basis of one person per each farmer organization. Extensive campaigns were launched using both leaflets and motion pictures (films and documentaries) to enlighten the community on the project objectives and get them actively participated and be stakeholders of the programme.

In addition, Community Resource Mapping was carried out involving both minor community groups and the key persons. The participants of the process identified the roads, houses, resource centres, paddy lands etc. and marked them on large sheets of paper. This exercise helped the participants to get an overall picture, identify the ‘parcels of land’ and fill the knowledge gaps. Moreover, it was a fascinating experience to work collectively in order to construct and visualize a representation of the area. The second stage of this exercise saw the support organization developing a Geographic Information System (GIS) map that integrated all the relevant data. These activities together formed a platform for the people to air their views pertaining to the programme, identify the intensity of the social impacts and propose suggestions. The very first attempt to assess social impacts was made at the Diagnostic Analysis Sessions, the first of which was conducted at the Divisional Secretariat level with the participation of stakeholders. In the order of priority, the people identified and listed the following potential and concrete social impacts:

i. Shortage of domestic water supply
ii. Shortage of food
iii. Loss of agricultural and fishing related employment
iv. Lack of seed paddy
v. Difficulties in servicing loans
vi. Drying of highland crops
vii. Impact on animal husbandry
viii. Health problems
ix. Negative impact on business and general economy

In addition to the identification and prioritization of the social impacts, the community was encouraged to come up with solutions. Further to proposing potential solutions to these issues, the community was helpful in evaluating potential solutions and determining the solution which would be the most pragmatic for a particular scenario. This is because some suggestions for livelihood support assistance plans that came from the community could not be viable. The impact mitigation plans (such as livelihood support and assistance programmes) were the culmination of a continuous dialogue with the community. Although the expert guidance was available to design the plans, what would or would not work in a particular situation was determined by the people, who, after all, were more familiar with the environment.

4. Livelihood Support Assistance Plans

After the social impacts were recognized and the viability of the suggested solutions evaluated, strategies were designed to mitigate the social impacts and provide livelihood support assistance. Since all the discussions, debates, propositions and agreements were based on the concept of ‘we, not I’ it was easy to agree on the most favourable solution. The plans that emerged from this process were called Livelihood Support Assistance (LSA) plans. The farmer-organizations had organized special events to celebrate the commencement of the LSAs programmes at field levels. The formulation of a Livelihood Support Assistance plan is presented in Figure 1. The sub plans of the LSA are enumerated as below:

i. Wage Assistance Plan
ii. Alternative Crops Plan
iii. Domestic Water Use Plan
iv. Gender Action Plan
The Wage Assistance Plan was designed to mitigate the negative impacts caused to people’s livelihood and income. This plan involved compensating people who had been engaged in diverse economic activities for sustenance of lives. Another plan executed in the project was the Alternative Crops Plan aimed to cultivate an alternative crop by utilizing the rain feed within the season affected by the water suspension. As the rehabilitation of the dams progressed, inevitably, suspension of water resulted in low levels of ground water in the surrounding areas, which in turn caused shortage of water for drinking and domestic purposes. To compound this situation the localities in question were encountering severe droughts. This potential hardship was addressed by the Drinking and Domestic Water Use Plan.

4.1 Implementation of Wage Assistance Plan

The people opted, out of several options, to undertake the rehabilitation of the local canal system, with material and expertise supplied by the DSWRPP. In this way, the community could generate an adequate personal income during the period of water suspension while contributing to the rehabilitation of the canal system which was an integral part of the irrigation system which accrued direct benefits to them. It was agreed to give the families the opportunity to earn Rupees 500 per day for 10 days in a month. These affected families were engaged in remedial work associated with the rehabilitation of irrigation canal systems including the main canal, branch canals and field canals which were spread over the entire field area of the scheme. Table 1 displays the funds distributed for LSA plans and the number of beneficiary families in relation to the four reservoirs that were rehabilitated. It should not go unnoticed that although they had to be paid money for sustenance, their contribution to the economy by engaging in the rehabilitation work was considerable.

Table 1 - Funds distributed for LSA plans and beneficiary populations

| Reservoir          | Amount Distributed (Million Rs) | Number of Beneficiary Families |
|-------------------|---------------------------------|-------------------------------|
| Nachchaduwa       | 45.9                            | 2769                          |
| Ridiyagama        | 46.4                            | 2893                          |
| Tabbowa           | 25.5                            | 1284                          |
| Usgala-Siyambalangamuwa | 24.4                        | 1398                          |
| Total             | 141.9                           | 8344                          |

Affected families were organized into sizable groups under their existing farmer organizations for easy implementation of the programme. Table 2 displays the allocation of funds for rehabilitation work of reservoirs and canals in relation to the four reservoirs that were rehabilitated, the estimates of which were prepared by the Department of Irrigation. One member from the eligible family had to attend to such work, from morning to noon, four hours a day according to the schedules prepared by the farmer-organizations in the area. Office bearers of the relevant farmer-organizations attended to the coordination activities while the Resident Project Manager (RPM) from the Irrigation Management Division together with an Engineering Assistant of the Department of Irrigation did the overall supervision of the programme under the guidance of the DSWRPP.

Table 2 - Distribution of funds for rehabilitation among reservoirs and canals

| Reservoir          | Amount Spent (Million Rupees) | Field Distribution | Branch and Main |
|-------------------|------------------------------|--------------------|-----------------|
| Nachchaduwa       | 44                           | 133                | 23              |
| Ridiyagama        | 45                           | 68                 | 76              |
| Tabbowa           | 23                           | 46                 | 08              |
| Usgala-Siyambalangamuwa | 22                        | 35                 | 07              |
| Total             | 134                          | 282                | 114             |
With regard to the Wage Assistance Plan, significant differences between the approaches taken by the DSWRPP and the other projects of similar nature can be observed. Although in traditional social safeguard programmes the affected people are provided with some form of assistance by way of monetary contributions to cope up with the temporary distresses caused, they would ultimately go back to their original living style immediately after the cessation of provision of such compensation.

On the other hand, the approach taken in this project, assisted by the rehabilitated network of canals, enhanced the capacity for farming. This resulted in a higher earning capacity enabling farmers to attain sustainable and higher socio economic standards. Further, livelihood
It was touching to observe the participation of disabled people in the programme and making contributions at times in extremely innovative ways. Figures 2, 3 and 4 show how people are engaged in the canal and dam rehabilitation work under LSA plans. The community functioned cohesively with one conviction, resembling an organic entity geared towards achieving a common goal. To say the least, achieving such results in a typical multi ethnic agrarian community could be an arduous task due to various reasons; farmers tend to show a negative attitude having been made to work as a wage labourer; getting Muslim women to participate in outdoor activities is hard due to religious, social and cultural constraints placed upon them. Yet, owing to the correct implementation strategies of LSAs such obstacles did not seem to have much of a negative impact on the progress; both these groups took part in the activities with no complaints or grievances. The ceremonies held at the commencement and closure of the programme, with an air of festivity, gave a ritualistic and symbolic perspective to the whole process. From the perspective of sociology, it can be stated without a doubt, that this programme certainly would foster social cohesion and harmony among social groups.

It is observed that such levels of commitment towards the programme could be garnered primarily due to the fact that the opinions and ideas of the community were integrated into the creation and implementation of the livelihood support assistance plan from the outset. Consequently, it can be assumed that the community regarded this programme as a

![Figure 2 - Farmer community helping in canal clearing](image)

Figure 2 - Farmer community helping in canal clearing

participants displayed a high degree of commitment which is certainly unique in a programme geared to mitigate social impacts.
plan of the people, by the people and for the people’.

What is significant in this context is that the success demonstrated in this aspect is attributable to the fact that the people collectively regarded the endeavour as one of their own; i.e. they believed that they were the primary stakeholders and beneficiaries of the programme and not just mere figures in abstract. This dimension of commitment can only be garnered by incorporating their ideas, concerns and support from the outset. This attribute is true with reference to all LSA plans of this nature.

4.2 Implementation of Alternative Crop Plan

The seeds and fertilizers were supplied by various stakeholder agencies including the Agrarian Services Department whose coordination with the farmers managed by the DSWRPP along with the support organizations.

This plan enabled the cultivation of:

i. 12,000 acres of green gram in Ridiyagama
ii. 1,000 acres of corn in Tabbowa
iii. 3,000 acres of vegetables (with their own funds)

The Alternative Crop Plan enabled the farmers to obtain further gains apart from the livelihood support assistance received from the WAP. They cultivated alternative crops by utilizing the water discharged from the reservoirs to enable rehabilitation work. Alternative crops were cultivated in more than 15,000 acres of land and the profits earned through this exceeded Rupees 200 million. This amount is more than the entire funds allocated for the Ridiyagama dam rehabilitation works. The degree of success in this situation is arguably unprecedented among the social impact mitigation programmes. The generation of profits in a programme expected to be dependent on compensation is a bonus and also a unique experience among the many such DSWRPP.

4.3 Implementation of Domestic Water Use Plan

The suspension of water during an entire season not only caused economic hardships but also shortage of water for drinking and domestic use. The solutions implemented by the DSWRPP with the support of Divisional Secretaries and local authorities included:

i. Making every effort to maintain sufficient ground water levels
ii. Storing discharged water in smaller tanks for periodic release
iii. Distribution of water through the strategic placement of bowsers

These solutions unlike in traditional dam rehabilitation projects came from the community itself, particularly the strategic placement of water resources. Similar to other two plans the characteristics of the people involved in planning have contributed to its successful implementation. When people who live in most parts of the dry zone suffered from the drought that prevailed in 2012, those who lived in the downstream of these four reservoirs did not experience problems due to the Domestic Water Use plan.

4.4 Implementation of Gender Action Plan

Since the poverty level of families in the affected communities is high the World Bank, as an additional strategy, took steps to enhance the family incomes by improving the earning capacities of women. They were trained to be self employed in small industries for which raw material was readily available in the village. Some of the cottage industries they were trained in are food seasoning, pottery, fruit and vegetable nurseries, livestock etc. In keeping with the World Bank policy the trainers for such activities were selected from among the community itself.
The World Bank is of the view that the women who were trained in such cottage industries would be able to continue with the vocations they have just started even after the rehabilitation work is over.

5. Conclusions

The foregoing sections describe the innovative manner in which the SSMP of the DSWRPP had been carried out in the rehabilitation work of the four selected reservoirs with the involvement of the thoroughgoing participation of the people. The programme has been able to involve people of all ages, ethnicities, income levels and gender in the activities such as rehabilitation of the canals and clearing of the abandoned roads to carry the harvest to main roads. The farmers believed that they have to do their part to get the dams hurriedly rehabilitated to avoid potential damage to the dam/reservoirs and thereby to their lives and properties.

The overarching argument that the authors have offered in this article is that programmes to assess and mitigate socio-economic impacts should also take into account the perspectives of the people without exclusively relying on specialists or technocrats. Further, transparency throughout the project period, an open dialogue with the affected people, empowerment of the community, commitment and unity should be made part and parcel of the process of being people oriented.

The present project represents the use of important ideals of beneficiary participation in the design and the management of the livelihood support assistance programme and their positive influence on the efficiency of implementation, cost reduction, maximization of benefits and project sustainability. Therefore, it is suggested that these ideals, utilized innovatively by the DSWRPP, should be used to address the issues pertaining to social safeguard management to be introduced in future projects.

References

1. ADBG (2012), Report on Options for the Integrated Safeguards Systems, African Development Bank Group.

2. DSWRPP (2008), Thirasara Diyawara, Dam Safety and Water Resources Planning Project-Sri Lanka, Mahaweli Authority of Sri Lanka.

3. Kaunaratne, S., (2003) Risk Assessment of 32 major dams in Sri Lanka for investment priorities, Dam Maintenance and Rehabilitation, Swets & Zeitlinger, Lisse, ISBN 9058095347.

4. Khagram, S., (2005) Dams and Development: Transnational Struggles for Water and Power. New Delhi: Oxford University Press 2005.

5. Schryer-Roy, A., (2012) DRR and land rehabilitation in Northern Somalia, African development Solutions. International Development’s Office of Foreign Disaster Assistance (OFDA).

6. Taylor, W., (2012) Project Affected Population and Livelihood Issues In Indian Himalayan Region, Climate Himalaya O/o Prakariti group, P.O. Silli, Agastyamuni, Rudraprayag, Uttarakhand, India 246421.