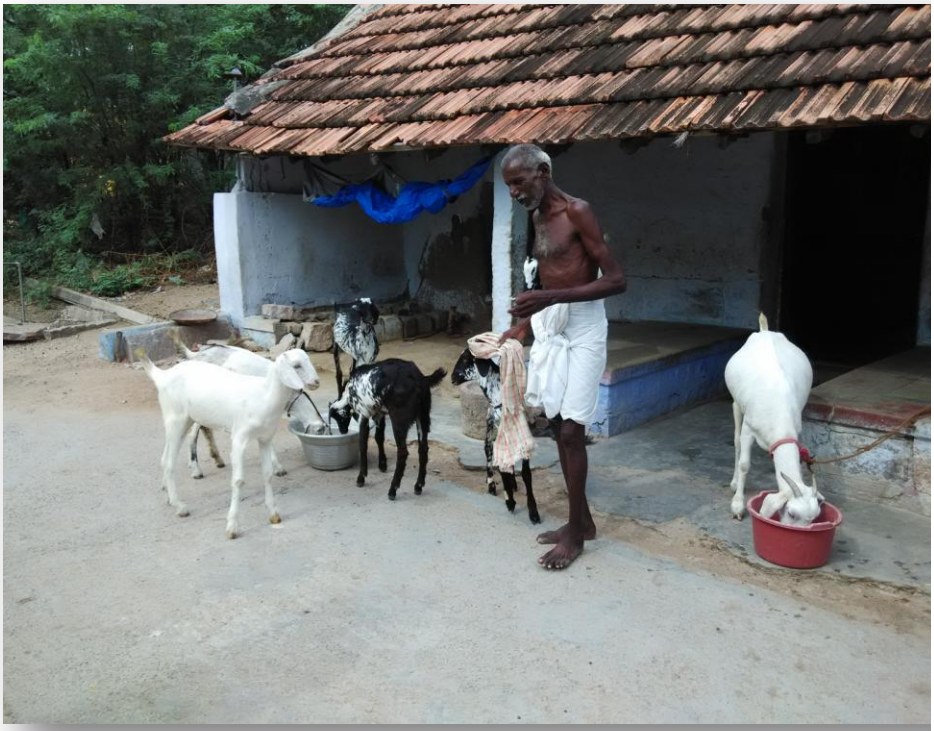

MIDLINE STUDY REPORT

Soil and water conservation for a sustainable improvement of local agriculture and living conditions for marginalized families

["**Soil and water conservation for a sustainable improvement of local agriculture and living conditions of marginalized families**" a livelihood support project is being implemented by RCPDS with funding support from BMZ and KNH, Germany. The project aims to benefit 8,860 families directly, with at least 42,656 people, including 16,304 children in two blocks viz. Narikudi and Tiruchuli of Virudhunagar district, Tamil Nadu,India]

Study by:

Catalyst Management Services Pvt. Ltd.

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ABBREVIATIONS AND ACRONYMS

BMZ	Federal Ministry for Economic Cooperation and Development
CB	Capacity Building
CBO	Community Based Organization
CMS	Catalyst Management Services
Govt.	Government
GSA	Group Self-Assessment
HH	Household
IG	Interest Groups
KII	Key Informants Interview
KNH	KinderNotHilfe
KVK	Krishi Vignyan Kendra (Farm Science Centre)
M&E	Monitoring and Evaluation
MIS	Management Information System
PRA	Participatory Rural Appraisal
RAF	Results Assessment Framework
RCPDS	Resource Centre for Participatory Development Studies
SC	Scheduled Caste
TSP	Total Sanitation Programme
WMS	Watershed Management Sangam
WMC	Watershed Management Committee

1. Acknowledgement

The midline study for the project titled “Soil and water conservation for a sustainable improvement of local agriculture and living conditions of marginalized families” was successfully carried out during August-September 2015. We express our sincere thanks to RCPDS(implementing partner), BMZ and KNH Germany (funding partners) for entrusting us the task of conducting this study, and for providing all necessary support for completing the study within the stipulated time. The study team acknowledges the contribution from the project team led by Dr. John Devavaram by way of providing crucial project documents, inputs on the project objectives, strategies, key activities and stakeholder’ involvement in the project, and also the logistical support extended during field work.

The study team acknowledges the contribution from Mr. Sathish Samuel, KNH India Coordinator for being present and providing his inputs during the inception workshop on the study methods, tools preparation and field work execution. The study team also recognizes the contributions made by all the CBO leaders present during the inception workshop, shared project’s progress, and their views on the project implementation, challenges and ways forward.

The study team also expresses its sincere thanks to all community members and secondary stakeholders who participated and provided key information during the primary data collection process. In addition to our study team a number of people at various levels have contributed towards the completion of the study. We sincerely thank all of them.

For the study team,

CMS

2. Executive Summary

Resource Centre for Participatory Development Studies (RCPDS) is implementing a project titled "Soil and water conservation for sustainable improvement of local agriculture and living conditions of marginalized families" with funding support from BMZ and KNH, Germany. The project is reaching out to 8,860 smallholder families directly, and another 42,656 people including round about 16,304 children through spill over in9 panchayats of 2 blocks (Narikudi and Tiruchuli) in Virudunagar District of Tamil Nadu.

The project aims to improve food security and reduce poverty through 1) sustainable protection, conservation and utilization of natural resources viz. soil, water and land; 2) diversified livelihood options and 3) enhanced health and sanitation conditions; contributing to ensuring realization of child rights. Towards this, in the past two years, RCPDS has implemented many activities pertaining to soil and water conservation, agriculture and allied, promotion and strengthening of community institutions, creating awareness and facilitating access to sanitation infrastructure.

The project has commissioned Catalyst Management Services (CMS) to facilitate a midline study for the intervention. The overall objective of the midline study is to assess the extent of achievements of the programme against the targets, understand the factors enabling and disabling achievement of targets, the extent of ownership built within the community, capture key learnings from the implementation experience thus far and recommend practical actions for the remaining project period. The specific areas of assessment included relevance, effectiveness, efficiency, impacts, sustainability and project management systems.

The study employed a mixed-method with quantitative study using tools such as individual household interviews and programme information system, and the qualitative study using participatory rural appraisal techniques, key informant interviews and group self-assessment exercises. The study covered 300 households from five panchayats for the quantitative study and qualitative study was implemented in three of those panchayats. The study was conducted over a month and half period during August-September 2015.

Key Findings

Overall, the project is highly relevant with its objectives and strategies being coherent and appropriate to the status and needs of communities, the local context in project location, the opportunities and good practices in empowerment and self-help approaches to sustainable development. The evidences from the baseline study confirms the pre-project situation of the area and the target communities, and therefore the relevant of this project – (a) the socio-economic status of target population is low; (b) the region is rainfed and population is primarily dependent on agriculture and allied; (c) very poor management of water resources; (d) practice of occupational migration; (d) poor access to sanitation facilities.Given this situation, the project focuses on improving the livelihoods, focusing on the agriculture and allied livelihoods, using a community-led participatory approach.

Addressing primarily the natural resources critical for agri-based livelihoods, i.e. soil, water and land, and combining this with the diversified option to supplement income and building resilience of farmers seems very relevant. The project also addresses the key concern of sanitation at the household level which is a big area of concern particularly for the children and women. The overall implementation approach is through community-based institutions with the implementation partner being facilitator, increasing the potential for sustaining benefits. Engaging with other key stakeholders at the community level, local governance and government departments are a part of the strategy to ensure long-term support and sustenance of the community institutions. Three key areas that could have been addressed better to improve the relevance are – (a) extent of coverage, in terms of covering higher proportion of people receiving benefits; (b) engagement with the markets, particularly for increasing returns for the harvest; and (c) more engagement of the youth for enterprises and employment, given that the work is largely in the space of livelihoods.

As for delivery of planned activities against these well laid out strategies, the project has done well with respect to soil and water conservation related works, community institutions, sanitation, but lagging behind in achieving targets for a few activities, like setting up of micro enterprises and joint farming, largely landless focused. While these activities are critical, as the target groups are more vulnerable (landless), there is a need to develop practical strategies in this area to ensure implementation.

Against the agreed set of results (outputs) of the project, achievements are significant for most areas as measured through key performance indicators of the result assessment framework.

- The reported availability of water for irrigation has increased from the baseline situation of 1-2 months to 3-5 months on an average across all sources, and significantly from ponds. Due to this and other water conservation initiatives, there has been an increase land under cultivation by about 20% to 25%.
- Though there is an improvement in number of famers adopting good agricultural practices (including organic methods), the awareness and adoption levels on natural resources management still need improvements.
- There is notable increase in the awareness levels and availing of various government schemes especially agriculture credit facilities, livestock and state health insurance schemes.
- The percentage of households migrating for occupational reasons has come down from 6% at baseline to 4% now. Also, there is a reduction in the percentage of migrating

households as families (taking their children along with them) have substantially 29% at baseline to nil.

- There is a marked increase in percentage of households accessing toilets from 2% at baseline to 20% now.
- There is a significant increase in the percentage of households accessing common property resources such as grazing lands, water sources and common infrastructure between baseline and midline. The percentage of households' access grazing lands has increased from 31% to 58%; water resources from 54% to 67% and common infrastructure from 19% to 61%.
- The cost of cultivation of major crops (Rs./Acre) such as blackgram and ground nut has come down from Rs. 7,113 to Rs. 5,667 and Rs. 13,285 to Rs. 11,709 respectively from baseline to midline. However, the cost of production for paddy and green gram has increased. Ideally the comparison on cost of cultivation has to be made between treatment and control farmers as there can be possible influence of natural inflation over the years. The productivity of paddy and green gram has increased from 1,418 kg/acre to 1,633 kg/acre and 79 kg/acre to 185 kg/acre. The annual household level income per annum has increased from Rs. 18, 324 at baseline to Rs. 32, 108, an increase of 75%. However, there may be natural inflation as explained in the case of cost of cultivation and hence the comparison of treatment and control farmers will reveal the actual increase by project interventions. As the study did not cover control group, this comparison is not possible.

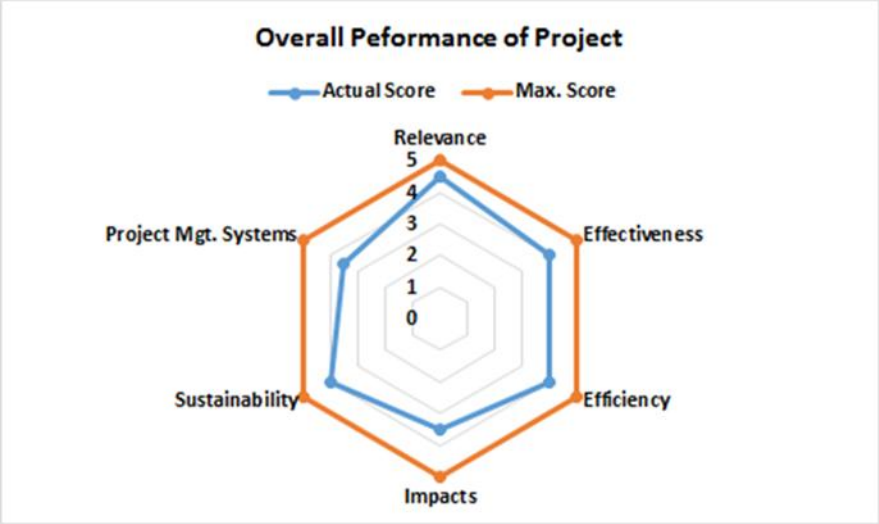
In terms of financials, the project has under-utilized the allocated resources during the first year due to delayed start of project implementation and slightly overshot the planned targets during the second year. There are no deviations in terms of spending of resources for its intended purposes. The budget utilized to achieve the physical targets and project objectives are appropriate and relevant.

Impacts due to project interventions are emerging both at households and village levels, captured largely through qualitative methods. Some of the impacts at household levels are 1) increased income due to productivity increase, reduction in cost and diversified livelihoods options 2) increased access to credit from formal sources with low cost of credit 3) reduction in migration and 4) increased safety and security of children through improved access to toilets. Some of the impacts at village levels are 1) increased number of lands brought under cultivation due to increased availability of water for irrigation 2) community based institutions in place and involve in programme.

The community institutions promoted by the project viz. Interest Groups, Watershed Management Sangams and Watershed Management Committee are relevant. The capacities of these institutions are assessed to be adequate at this stage of the project but needs improvements in the coming years in areas like resource mobilization and plans & systems.The project has made good progress in moving towards sustainability on the aspects of technical, institutional, financial and environmental.Anumber of suggestions have been given under recommendations (strategic pathway) to move forward.

The project management systems planned for the project seems adequate, but full scale implementation of all planned systems is to be undertaken with immediate effect. Currently, only the inputs-activity monitoring system is being practiced by the project with rigor.

Overall, the project has made significant progress against the assessment parameters and the following section provides suggestions and recommendations to improve the performance further.



Flowing from the assessment and reflections with the communities and programme team, the study team suggests the following towards improving the overall effectiveness and sustainability of the project. As the project has completed half of its allotted duration, there is a need to look at both the programme and strategic aspects.

Therefore, the suggestions provided are in two parts: Operational and Strategic. The operational suggestions are related to ensuring that how the current strategies and planned activities in the project are delivered well, and the Strategic ones are the areas where the project can think of investing its efforts to bring in new ideas and approaches that have potential or deeper and larger impact, which will increase the potential for sustainability manifolds.

Suggestions related to Operations:

1. Accelerate the work on promoting micro-enterprises and small start-up for the landless and marginal farmers. Remove the barrier of uptake by looking at appropriate per-unit financing (probably increasing it from Rs. 2,500 per unit to practical levels), and providing intensive enterprise enablers support through a set of non-farm enterprise team. Helping them to identify enterprises, undertake community-friendly business plans, hand-holding support to run these enterprises, and more importantly ways to engage with the market are critical inputs to be provided by the project. A change in the strategy, team expertise and allocation is required to ensure that this component is delivered well.
2. Revisit and revise the strategy on seeds bank, as this is one of the critical inputs at the farm level to ensure higher productivity and incomes. Working with the exiting reputed government/ quasi-government agency through a linkage-model be the best way forward. Linkages with the National Seeds Corporation (NSC) at Kappalur can be explored, which can provide opportunities through existing schemes. The project can also engage with seeds certification department of the government, NABARD and Tamil Nadu Agricultural University (TNAU) to facilitate the same.
3. Increase the uptake of the sustainable natural resource management practices by farmers by modifying and improving current awareness building strategies, to move towards behavior change communication strategies. Use of locally appropriate ICT based technology (such as Digital Green videos), assessment of the barriers to adoption and designing focused communication around those, incentivizing adoption through linkage with credit, schemes and market opportunities, etc. to be explored.
4. Scale up further and explore new opportunities in the access to the government schemes and programmes on variety of areas. Particular focus should be on schemes like irrigation equipment, seeds/saplings subsidy schemes, land development schemes which saw a low up-take by farmers. Setting up a 'social protection facilitation desk' at the cluster/ federation level in which each family-wise eligibility, access to civic identity, schemes and programmes can be tracked and accordingly facilitated. This kind of a helpdesk will also help to aggregate demand and undertake advocacy with variety of departments.
5. Intensify work by covering more households under the sanitation programme, particularly construction and use of toilets. Continue and accelerate the linkage with the government programmes, with their renewed focus through Swachh Bharat Programme. Also, within the Federation, facilitate policies to prioritise credit products for construction of toilets by households themselves, without depending on the government schemes.

6. Stop pursuing joint farming idea as it is faced with a number of challenges, such as inadequate returns for leaseholders and hence not willing to lease their lands, inability of the lessees to make additional investments to bring back the lands for cultivation (as most lands leased out are unsuitable for cultivation), risks of monsoon failures etc. Explore allied activities instead of joint farming.
7. Initiate market engagements through communities as this is the aspirations emerging, and without the market engagements deriving more incomes from the value chain is impossible. Engaging with markets/ market players is not easy, particularly for facilitating organisations that are working on the community side/ empowerment approaches. However, there are plenty of opportunities in the sector wherein Producer Organisations/ Companies are encouraged and this is an area that the project needs to plan to ensure sustainable increases in incomes for farmers, coming from the value chains. This component is explained in detail under the suggestions on strategic pathways.
8. Develop a long-term sustainable institutional plan integrating variety of community institutions that are promoted by the project, to ensure that different roles envisaged are performed by different community institutions (allowed legally and functionally; and accordingly capacitated), and there is a link to support of RCPDS as an institution to ensure support. This component is explained in detail under the suggestions on strategic pathways.
9. Ensure full-scale implementation of the Project Management System, going beyond the basic input-activity monitoring. Process quality monitoring system is critical and this needs to be done once a quarter at least. The results tracking should be taken up bi-annually and there is a need to facilitate learning forum annually along with annual review and planning meetings.

Suggestions on Strategic Pathway:

As can be seen from the above, the project has enabled access to a number of services for the households, such as financing, awareness and access to soil and water conservation technologies, practices, toilets, allied activities, seed and farm inputs, access to key entitlements and schemes of the government, etc. It is also clear that these services are helping the communities to strengthen their livelihoods. Therefore, these community-friendly and appropriate services need to continue. However, as the support from donors is for specific period under the project, there is a need to create sustainable institutional mechanisms to continue to provide these services to farmers. To this effect, the project has done well to develop numbers of Community Institutions (such as SHGs, WDC, WMC, etc.) with each institution expected to perform a specific role.

Building on the assessment and the base created by the project, few suggestions for moving forward is provided here. While planning way forward for institutional framework and strategies, the key considerations that Project needs to plan are:

- Continuing the critical services that have led to impacts during the last two years – investments in lands and water (through community institutional approach), continuous awareness and capacity building on good agricultural practices
- Intensification and deepening of impacts through add-on services – marketing (more critical as expressed by WMC members), agriculture focused credit/financing, and other value chain investments (for processing, commodity trading, seeds, etc.)
- Expanding scale of operations (beyond just these project villages) which can leverage costs and improve economies of scale and to sustain the key community and resource institutions that are critical for support

There are a number of strengths that project has to move forward. The resources and the establishments that the project has built so far are listed here, and these will be key bases to build future:

- Community institutions at various levels,
- Community investment funds of Rs. 66 lakh
- Pre-tested package of practices,
- Field base of CFCD intervention in the neighbourhood and
- RCPDS infrastructure and commitment for long-term support; and the available opportunities with government and other actors

There are plenty of opportunities available (both within RCPDS, and outside in the sector) to leverage, and these are:

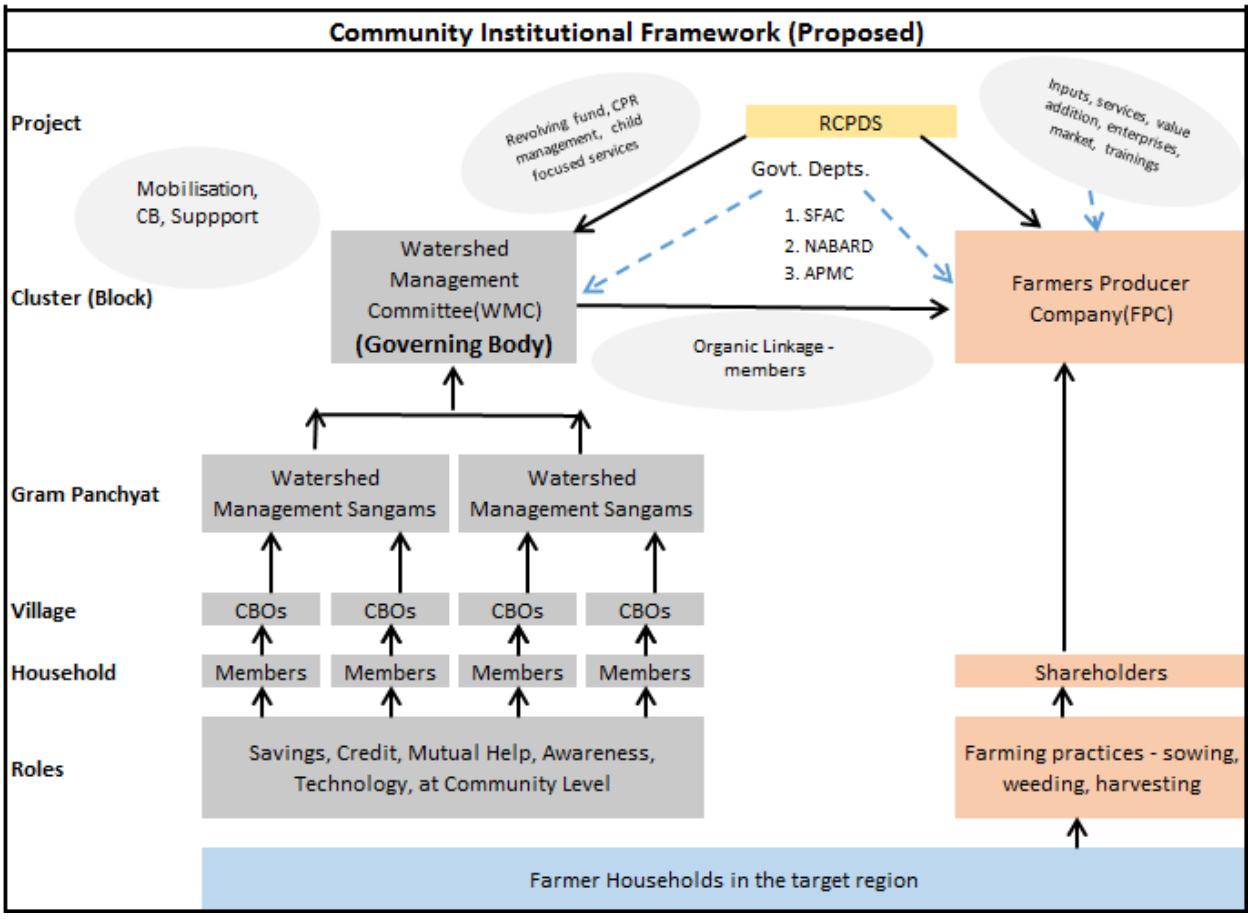
- Producer institutions – focus, incentives, support systems and opportunities (Grant equity, resource institutions, credit guarantee) – SFAC, NABARD, PROCIF…
- Producer company – under companies Act, but built on cooperative principles and model
- Financing institutions, increasing focus for credit linkages for producer organisations
- E-based marketing, direct corporate linkages for farmers' institutions
- Huge need for support in nearby areas (Narikudi)
- Increased focus on climate change investments (land, water and bio-diversity critical areas)
- KNH too looking at Producer Institutions for sustaining livelihood investments, and deepening impact

By looking through these, the strategic pathway for the Project is suggested.

1. Ensure strengthening of the community institutions into strong institutional structures, with clear functionality, legal form, roles and more importantly a kind of formal network with RCPDS as the key resource agency supporting this for a long-term. This will require:
    - FIG based Watershed Management Committees – focus on land and water investments; continue to be a society and handle revolving credit + POPs – with very low or no interest; but look for long-term investment in common property + social investments – also government entitlements (Federated Structure, under Societies/ Trust)
    - Livelihood focussed producer organisation – Agri Producers' Company – to be formed – under Companies Act – Inputs, Marketing, Credit, Value Addition (Business Oriented) – Have a resource institution good in business to support and partner with facilitating organisation (such as SFAC RIs, NABARD RIs) – Community Business Institution
    - Both these community organisations along with RCPDS enter into a Memorandum of Understanding for working together for the benefit of communities in the long-run.
2. Programme component-wise, many suggestions are given under operations. More on the strategic side are:
    - Intensifying and deepening work in existing BMZ-KNH Project supported areas
    - Expanding base – both new areas and CFCD project institutions so that reasonable scale is reached for sustaining future community initiatives in marketing, credit and advocacy efforts.
3. RCPDS – continues to be a support institution, with a tripartite agreement – People-Professional Partnership
    - MOU between RCPDS – WMC - APC, with a part of the profits flowing back to the child development work, i.e the impact which KNH is interested in
    - Producer Institutions and WMC – pay for the cost of facilitation and children level investments from their profits
4. Establish strong linkages with SFAC, NABARD, NABFINs, FWWB, Etc. – for continued support for the initiative, directly or through established resource/ support institutions

Overall, a new-age model under KNH supported projects can emerge out of this important project. This will be focusing on livelihood institutions to ensure and sustain the benefit of economic development beyond SHG-based empowerment, and ensuring flowing back of

economic benefit to the child development, through an effective institutional mechanism. The suggested community institutional model is given below



3. Introduction

The project titled “Soil and water conservation for sustainable improvement of local agriculture and living conditions of marginalized families” is being implemented by Resource Centre for Participatory Development Studies (RCPDS) in 9 panchayats spread across 2 blocks (Narikudi and Tiruchuli) in Virudunagar District of Tamilnadu, India. The project is funded by BMZ with co-funding fromKNH, Germany. The project aims to improve food security and reduce poverty through 1) sustainable protection, conservation and utilization of natural resources viz. soil, water and land; 2) diversified livelihood options and 3) enhanced health and sanitation conditions; contributing to ensure child rights realization. The purpose of the project is to improve the living conditions of 8,860 smallholder families spread across 9 panchayats directly, and reach out to at least 42,656 people, including round about 16,304 children through spill over. The target group includes landless, catchment farmers, command farmers and women headed households and coverage of secondary stakeholder include local administration (Gram Panchayats), govt. line departments, KVKs etc.

The specific objectives of the project are,

1) 1,500 farming families dependent on irrigated farming grow and harvest food crops on a regular basis.
2) 4,000 farming families dependent on rain-fed farming grow food crops in ways that conserve water and land.
3) 1,600 landless families and women-led households improve their regular income possibilities.
4) 2,500 families improve their sanitation equipment and personal hygiene.
5) The target communities have access to various state institutions and public services.

The key performance indicators for each of the above said specific objectives were well defined and benchmark for these indicators set out through a detailed baseline study at the start. The project duration is 45 months, and over the past two years RCPDS has carried out many activities pertaining to soil water conservation, agriculture and allied, promotion and strengthening of community institutions, creating awareness and access to sanitation infrastructure with an aim to improve the livelihood conditions of the target group in the region.

In order to take stock of the progress at midline and provide recommendations for moving forward, RCPDS/KNH has contracted Catalyst Management Services Pvt. Ltd, a management consulting firm to facilitate a participatory midline study.

This is the report of CMS on the midline study.

4. Project Design

Based on the review of project documents and discussions with RCPDS team, a Theory of Change/Project Design for the project has been developed, which is presented in the schema below.The schema captures the problem situation, inputs, project objectives, key performance indicators for measurement, risks and mitigation measures.

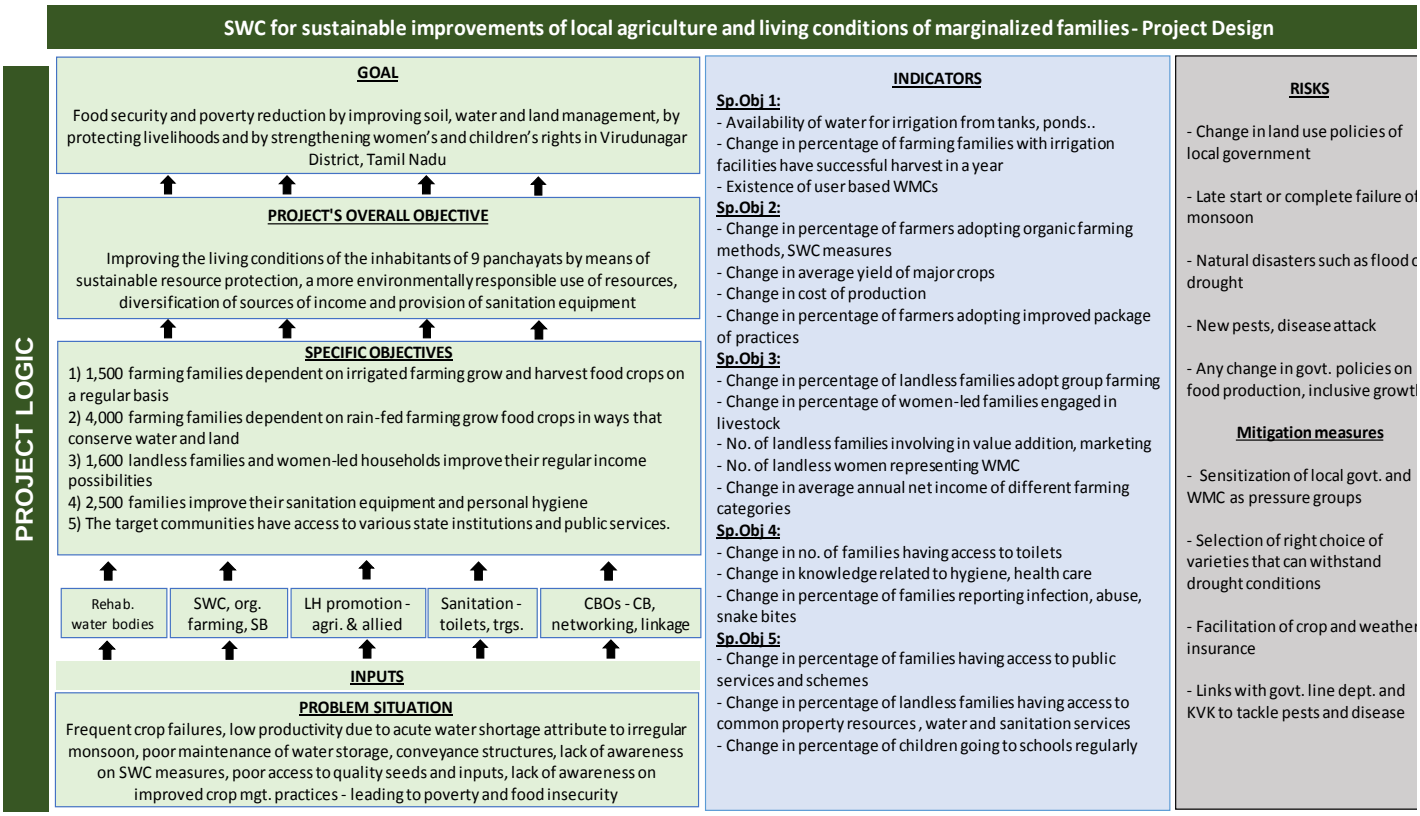


Figure 1 - Project Design

5. Study objectives

The overall objective of the midline study is to assess the extent of targets achieved thus far in the project, understand the determinants enabling and disabling achievement of targets, the extent of ownership built within the community, capture key learnings from the implementation experience and recommend doable actions for the remaining project period.

The study will help RCPDS/KNH with the evidences, insights on the extent of achievement of objectives, factors that facilitate and impede the progress, and provide recommendations for midcourse corrections if any.

Specific evaluation objectives are to:

- Assess the project progress so far and its likelihood of achieving its stated objectives
- Assess the relevance, effectiveness, efficiency of project implementation and level of ownership by project beneficiaries and other actors
- Assess the effectiveness of networking with the different stakeholders for optimal leveraging of resources and sustainability benefits.
- Based on the above, the mid-term evaluation study should generate practical, hands-on recommendations that can be implemented by the project actors

The specific focus areas of assessment are

1. **Relevance:**
    a. Is the project context relevant
    b. Is the targeting correct; and are there any excluded communities left out
    c. How coherent are the project approaches in addressing the needs and priorities of target beneficiaries
2. **Effectiveness:**
    a. What has been the project progress on agreed objectives (indicators based trends)
    b. To what extent the project is likely to achieve its stated objectives, what are the determinants enabling and disabling these
    c. Are there any unintended positive or negative impacts; if so what the project can do in maximizing positive and minimizing negative impacts
3. **Efficiency:**
    a. How efficient was the financial resources utilization; any major deviations and if so how can that be justified
    b. What have been the external resources mobilized – plans vs. targets; proportion to funding from KNH/BMZ

4. **Sustainability:**
    a. To what extent the project benefits are likely to sustain; what are the evidences
    b. How strong are the community institutions to self-manage and manage project activities
    c. What is the level of ownership, involvement and contribution to this project by stakeholders including target beneficiaries
5. **Project Management:**
    a. How effective is the M&E system and what improvements needed to strengthen, if required

The evaluation framework adopted by the study is given below

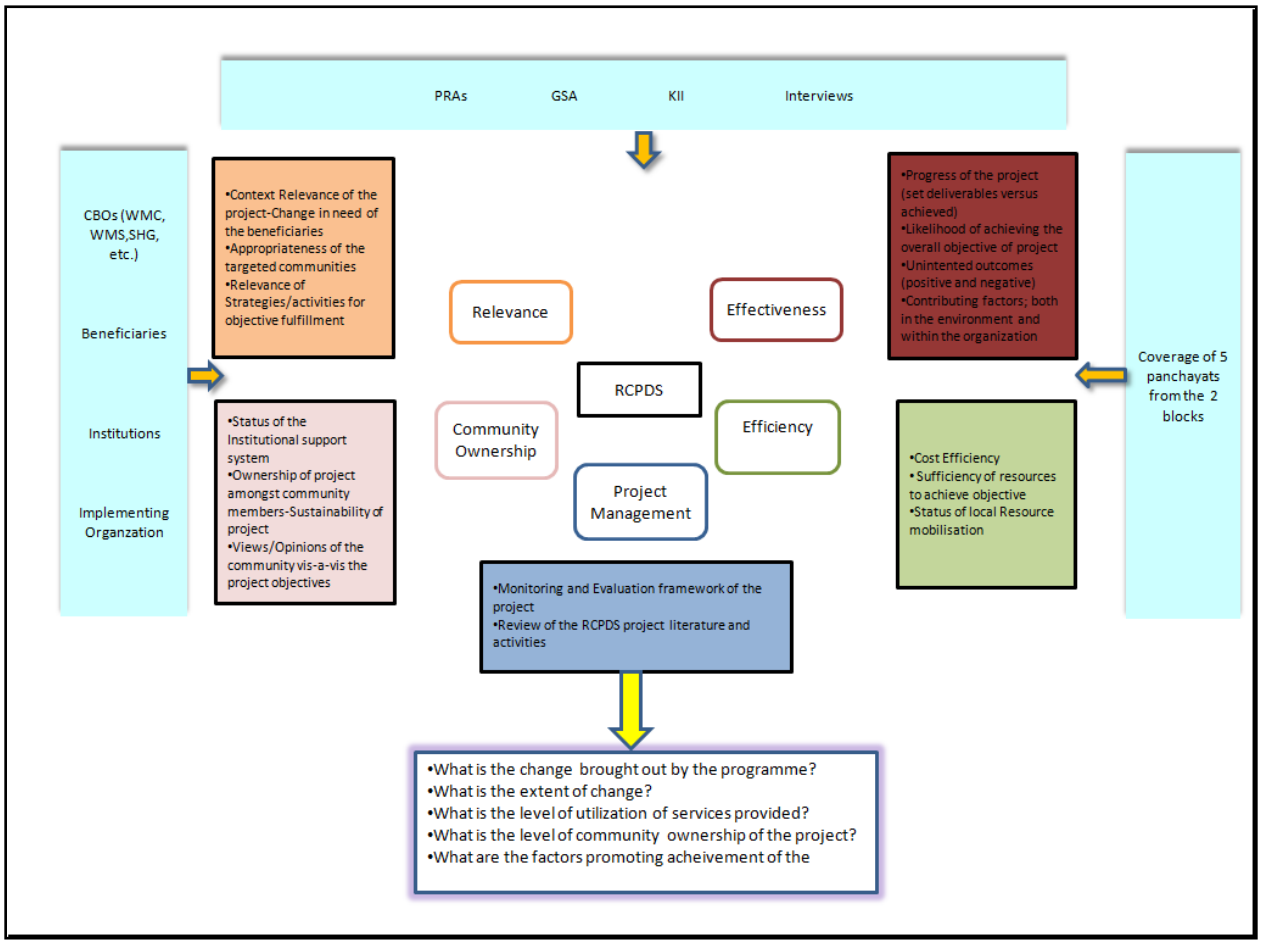


Figure 2: Evaluation Framework

6. Study methodology

Study Design

The study adopted a mixed method design that combines quantitative and qualitative methods. Quantitative method was used to understand the scale and trends and qualitative methods were adopted to assess the magnitude of the issues, factors enabling and disabling progress and their causal relationship. The quantitative data was collected using a structured questionnaire as referenced from the baseline study questionnaire incorporating changes for the midline study. The qualitative study used Participatory Rural Appraisal techniques (PRA - resources mapping, livelihoods trend analysis, venn diagram and seasonal analysis), Key Informant Interviews (KII) using semi-structured questionnaire, and Group Self-Assessment tool for assessing the performance of various CBOs. The tools (questionnaire, checklists) were developed participatory during the inception workshop with inputs from all key stakes. Apart from primary data collection, the study collected secondary data available with the project and reviewed

Sampling

The field study was conducted in five out of nine Panchayats and covered 300 beneficiaries through individual household survey. In order to bring in diversity to the samples, the Panchayats with varying access to services were selected for the study. The selection of Panchayats was done during the inception meeting in consultation with project team and stakeholders. The number of samples within each panchayat are proportion to the total number of baseline samples in the respective Panchayats and the households within each panchayat were selected at random through system generation (SPSS). The qualitative study was conducted in three out of these 5 panchayats. The following table shows the no. of samples covered under each method

Methods	Respondent(s)	Tools	Coverage (Nos.)
Household Interviews	Adult in the beneficiary household	Structured Questionnaire	300 (5 GPs)
PRA	Target beneficiaries (mixed group)	PRA checklists / guide	3 GPs (set of 4 tools in each GP)
Key Informant Interviews	Panchayat leaders, village elders, Govt. officials	Semi-structured questionnaire	6
Community Institutions	Office bearers and member representatives of WMC, WMS, IG	GSAT	8
Technical Assessments	Target beneficiaries (individuals and community institutions)	Field inspection/ discussions	3 GPs

Table 1 – Sampling scheme

7. Findings

The data collected through various survey methods have been analyzed and presented here under various headings and sub-headings. This section details out and provide answers to the evaluation questions with respect to the specific areas of assessment such as relevance, effectiveness, efficiency, sustainability, and project management. For the comparative analysis of household data, the baseline datasets of same 300 farmers who were covered during the midline study are taken using unique farmer ID codes.

7.1 Overview of the Sample

As per theplan, the study covered a total of 300 beneficiary households from the selected five Panchayats. The tables below show the distribution of beneficiary households covered in the midline across selected Panchayats and types of farmer category.

Sample Population - Panchayat Wise			
S.No	Panchayat	No's	%
1	Nallukurichi	95	32%
2	Agathakulam	89	30%
3	Pillayarnatham	50	17%
4	Udayanampatti	22	7%
5	Kuchampatti	44	15%
	Total	**300**	**100%**

Table 2 - Panchayat wise samples

Category of the farmers - Midline			
S.No	Particulars	Nos.	%
1	Command Farmers	71	24%
2	Catchment Farmers	17	6%
3	Landless	87	29%
4	Women Farmers	18	6%
5	Command & Catchement Farmers	107	36%
6	**Total**	300	100%

Table 3 - Samples farmer category wise

7.2Relevance

Context: The project is implemented in 9 Panchayats of Tiruchuli and Narikudi blocks, targeting 8860 agriculture dependent families directly. The socio-economic status of the target population was low at baseline as referenced from various project documents including baseline study report and interactions with target beneficiaries and stakeholders.

The primary livelihood of the target population was agriculture dependent either as famer or as agriculture wage labour. The target region is rain-fed and the status and management of water harvesting, storage and conveyance structures were poor at the baseline risking agriculture a gambling of monsoon. Due to unpredictable and unreliable income from agriculture there had been migration of families in the selected Panchayats which affected children schooling and their rights. The availability and access to sanitation facilities at the start of this project were poor, led to many health complications and risks particularly for girl children

Coherence: The project has adopted an inclusive approach of working with the farmers in catchment area, command area, landless labourers and women headed households. The focus is on improving the livelihoods conditions of target population - 1) *command farmers* through rehabilitation and renovation of water storage and conveyance structures; 2) *catchment farmers* through appropriate soil and water conservation measures and improved cultivation practices; 3) *landless and women headed families* through joint farming, livestock and value addition enterprises; 4) improved access to sanitation facilities and hygienic practices; 5) improved access to various social entitlement schemes and programmes. The study assessed that the strategies are relevant and appropriate to address the root causes of poor livelihood conditions of each of the target segment.

Approaches: The project has ensured participation and contribution of beneficiaries in all key project activities through a community-led approach and made mandatory the representation of marginalized and vulnerable in the community based organizations such as Interest Groups (IG), Water Management Sangams (WMS) and Watershed Management Committee (WMC). The project has also established linkages with other stakeholders such as KVK, Dept. of Agri. Engineering, Department of Agriculture, National Seeds Corporation, Department of Health and Sanitation, Local Administration in the region and leveraged programmes in favour of the target population.

Hence, the project has **high relevance to the context** of facilitating sustainable agriculture based livelihoods support to marginalized and vulnerable; the **project objectives and strategies are coherent** with the needs and priorities of the target population; the implementation **approaches are participatory** involving all key stakeholders, especially the target population in the implementation processes

7.3Effectiveness

This section details out the extent to which the project has progressed towards achieving its stated objectives as against the key performance indicators and factors influencing the progress.

Household Characteristics

Table 4 below, gives detailed percentages at baseline and midline against key household characteristics. When we look at the type of house, there is not a very significant change in the respondents who have a pucca or a semi-pucca house from baseline to midline. There is a 2% increase (baseline 0%, midline 2%) in the respondents who now live in a rented house. One of the key changes from baseline to midline is in the percentage of households that have access to toilet; 25% at midline as compared to 3% at the baseline. In keeping with this, the households with own toilets has increased from 2% at baseline to 20% at the midline. About 55% attributed this change to project contribution; 39% self and another 5% to government.

	Respondent Cat	Baseline	Midline
Type of House	Pucca	30%	34%
	Semi-Pucca	67%	62%
	Kutcha	4%	4%
Ownership of the HH	Own	95%	92%
	Rented	0%	2%
	Leased	0%	0%
	Provided by the	4%	5%
HH have access toilet	Yes	3%	25%
	No	97%	75%
Type of Toilet	Own Toilet	2%	20%
	Shared Toilet	0%	4%
	Community toil	0%	0%
If own toilet, who supported for construction	Self	0%	39%
	Project/ Govern	0%	3%
	Project	0%	52%
	Government	0%	5%

Table 4: Household characteristics of the respondents

Occupation profile of the farmers

The respondents were asked about their primeoccupation. Figure 3 below, shows the three occupations that showed a noticeable change from baseline to midline. Casual labor as the primary occupation for the respondent increased from 8% at the baseline to 13% at the midline. There was also an increase in the respondents who did casual labor as a secondary occupation. Another noticeable change is the reduction in percentage of respondents practicing agriculture as a primary occupation from 70% respondents at the baseline to 63% respondents at the midline.The 7% farmers who reported a change in occupation are marginal farmers, having a small piece of lands and they attributed the change to monsoon failure and also inadequate returns from their lands.

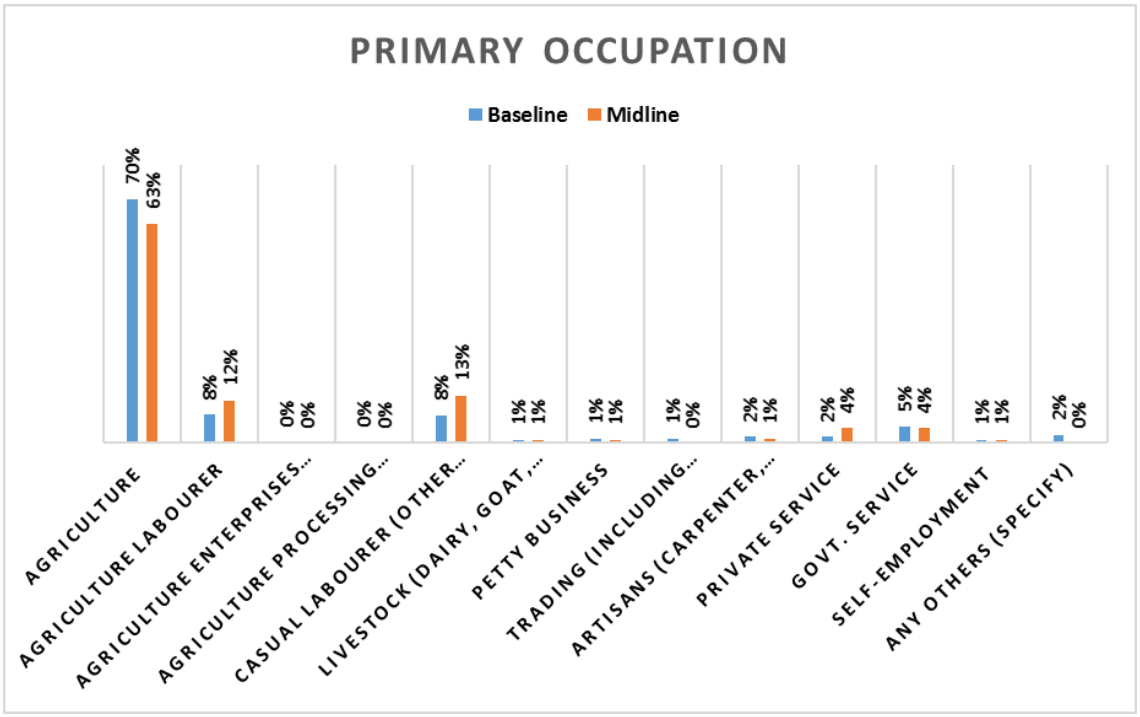


Figure 3: Occupational profile of respondents (Primary)

Irrigation-Sources, Availability and Type

Overall, about 58% of the respondents reported having access to water for irrigation. Respondents were asked about the different type of sources of water that they had access to for irrigation. One of the distinctively observable changes was in the percentage of households that had access to pond water at the baseline (4%) to those at the midline (44%). The table 5 shows the availability of water for irrigation from different sources between baseline and midline. It can be seen that, there is a considerable improvement in the percentage of households that report increased availability of water for irrigation, from all sources.

Availability of Water (months)							
S.No	Months	Lake		Ponds		Openwell	
		Baseline	Midline	Baseline	Midline	Baseline	Midline
1	One to Two	17%	1%	97%	3%	0%	96%
2	Three to Four	48%	51%	2%	45%	0%	4%
3	Four to Five	32%	47%	1%	46%	0%	0%
4	Above Six	3%	1%	0%	5%	0%	0%

Table 5: Availability of water for irrigation

The different irrigation techniques like drip irrigation, sprinkler irrigation and SRI did not see any noticeable change in terms of increased adoption.

Awareness on Entitlements and Schemes

Table 6 below shows comparative figures of awareness on entitlements and the status of availed schemes at baseline and midline.

Type of Schemes/Programmes	Awareness		Availed		If availed Who Facilitated - Midline			
	Baseline	Midline	Baseline	Midline	Project	Self	Governme	Others
Agriculture credit facilities	58%	61%	8%	45%	64%	9%	20%	7%
Land development schemes (SWC related)	34%	50%	7%	9%	64%	14%	21%	0%
Irrigation related schemes (drip, sprinkler)	38%	67%	7%	1%	100%	0%	0%	0%
Seed/sapling subsidy schemes	51%	52%	21%	9%	21%	14%	64%	0%
Public Distribution System (PDS)	95%	100%	97%	98%	2%	1%	96%	1%
State health insurance scheme	87%	71%	47%	81%	3%	3%	93%	0%
Noon Meal Scheme for children	87%	84%	77%	61%	2%	2%	96%	0%
Livestock related (dairy, goat, sheep, poultry…)	74%	74%	17%	44%	33%	50%	13%	4%
MGNREGA	94%	95%	90%	93%	2%	2%	96%	0%
Crop Insurance	0%	27%	0%	26%	7%	31%	0%	0%
Green House	0%	46%	0%	24%	3%	6%	91%	0%

Table 6-Awareness of Entitlements/Availed Status

From the above table it is evident that the awareness about the irrigation related schemes (drips, sprinklers) has almost doubled from baseline (38%) to midline (67%). However, the status of availing such schemes is very low during the last two years. Another noticeable change is in the percentage of households accessing agriculture credit services from 8% at baseline to 45% at the midline. The attribution to project is high for facilitation of schemes like agriculture credit facilities, land development schemes and irrigation related schemes. Another significant change is the increase in percentage of households availed livestock related schemeswhich has increased to 44% from 17% at baseline and about one-third of them attribute this to project.

Awareness on NRM

The study assessed the progress on the soil and water conservation practices amongst the beneficiary households from baseline to midline. These are summarized below in Table 7. There are significant improvements in awareness levels in the households as the percentage households reporting ‘not aware’ has come down from baseline to midline.There is a marked improvement in the percentage of households aware and practicing couple of practices regularly at midline vis-à-vis baseline; maintenance of crop residues (baseline-5%, midline-17%), ploughing across slope (baseline-3%, midline-24%) and cultivation of cover crops (baseline-3%, midline-14%).

Table 7 below shows the various NRM practices and their corresponding awareness and adoption levels at baseline and midline.

Awareness and adoption of soil and water conservation practices								
Knowledge and Practices	Not Aware		Aware,but not adopting		Aware,Practicing Some time		Aware Practicing	
	Baseline	Midline	Baseline	Midline	Baseline	Midline	Baseline	Midline
Maintain crop residues, use them during ploughing	42%	15%	48%	57%	4%	12%	5%	17%
Cultivation of cover crops/legume crops/green manure	38%	20%	46%	52%	13%	14%	3%	14%
Crop rotation	33%	19%	31%	51%	26%	17%	10%	13%
Use of organic Manure (FYM, Vermi, Neem, PK)	28%	18%	21%	51%	33%	17%	18%	13%
Appropriate quantity and right timing of application of any fertilisers (three Key stages) and soil conditioners	31%	27%	16%	52%	23%	8%	31%	13%
Soil test done for taking decisions on nutrient applications	51%	23%	22%	42%	17%	29%	9%	6%
Mulching	55%	29%	34%	49%	8%	9%	3%	13%
Contour bunding/trenching	37%	33%	25%	42%	22%	14%	16%	10%
Farm bunding	36%	33%	39%	39%	15%	14%	11%	14%
Ploughing across slope	37%	28%	40%	35%	20%	13%	3%	24%
Gully plugs/checks	44%	34%	43%	41%	11%	17%	3%	9%
Vegetative hedges	52%	35%	41%	59%	6%	5%	1%	1%
Tree planting along the banks/field bunds	40%	23%	50%	54%	9%	17%	2%	6%
Intensive/Inter cropping	40%	22%	36%	53%	14%	14%	11%	11%

Table 7-Awareness and adoption of soil and water conservation practices

Migration

There is a reduction in percentage of households who migrate for occupational reasons from 6% from baseline to 4% now. While there is a reduction in short term and long term migration, seasonal migration remains unchanged. When asked about the course of their children's education in such a scenario then the percentage of households that take their children along with them had come down from 29% at baseline to nil at midline. This was corroborated with children drop-out in the study villages. When asked about the child drop-out, none of the respondent report there was any children drop-out in their HH.

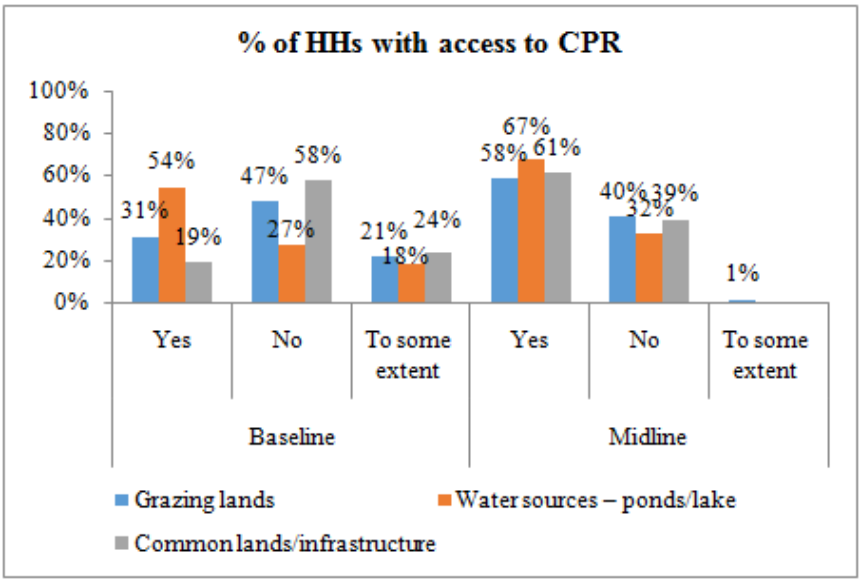
Sanitation

The percentage of household having own toilet has increased from 2% at baseline to 20% at midline. About 55% respondents attribute this change to project. Lack of availability of water for toilet purposes was mentioned as one of the key deterrents during the interactions with key persons from the panchayats. It was also brought to notice that the beneficiaries were realizing the importance of usage of toilets. Awareness of sanitation also came out as one of the key benefits or project's work.

Access to Common Property Resources

The adjacent graph shows the comparative percentage of households with access to common property resources at baseline and midline. There is a visible increase in the percentage of households accessing grazing lands, water sources and common lands/infrastructure between baseline and midline. 58% of the households now access the grazing lands as compared to 31%

at the baseline; 67% of households now access water sources compared 54% at baseline; and 61% access common



lands/infrastructure as against just 19% at the baseline.

Figure 4: Common Property Resources

Cost of cultivation, Productivity and Income

The following graphs show the cost of cultivation and productivity of main crops in the villages selected for midline assessment. Ideally, the comparison on change in cost of production has to be made between treatment and control group and not between baseline and midline as there maybe external factors such as inflation affecting the costs of inputs. However, as the study

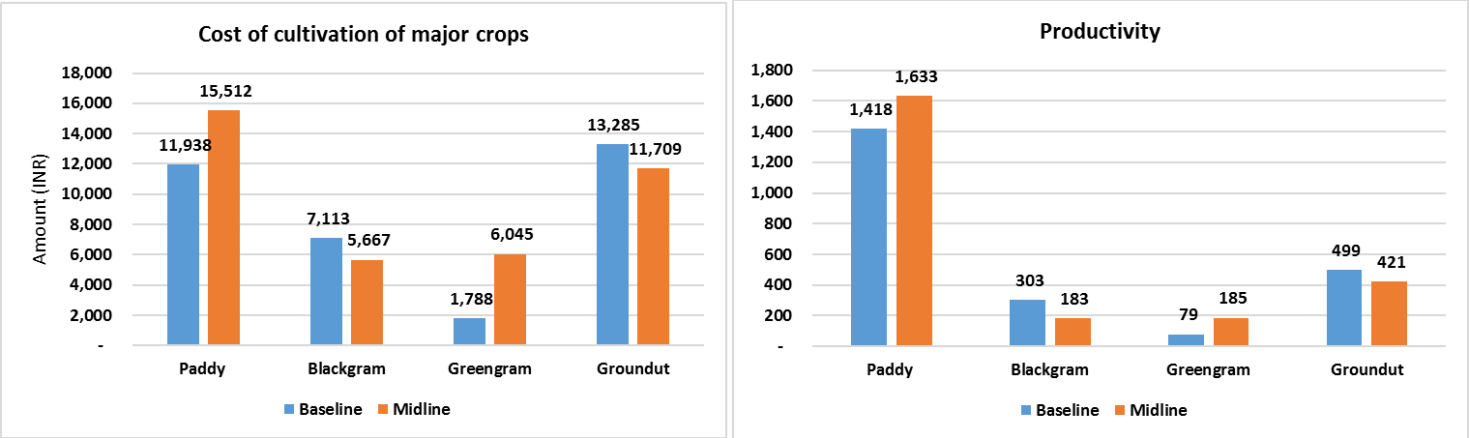


Figure 5: Cost of Cultivation/ Productivity and Income

covered only treatment population the comparison can't be made using household data.

In the PRA and key informant interviews it was reported that the yield and income for the farmers had increased from baseline to midline. The area under cultivation for vegetables, groundnuts and flowers had also increased since the last year. Awareness generation about organic farming, efficient agricultural practices were few of the key benefits of the projects that was reported by the key informants. The total annual household income has increased from Rs. 18, 324 at baseline to Rs. 32, 108, an increase of 75%.

Level of uptake of project's services

71% of the households reported that they received at least any one of services from the project. About 58% reported having received crop assistance; 9% received seeds assistance; 7% received goats and 26% received assistance for toilet construction. The respondents were also asked about the frequency of interaction of the project staff. 65% reported that the project staff visited them every 2-3 days. Further, only 6% reported that the project staff visited after a month or once a month. Thus there is regular and frequent interaction between the project staff and the beneficiaries which is an important factor in ensuring higher adoption of the package of practices.

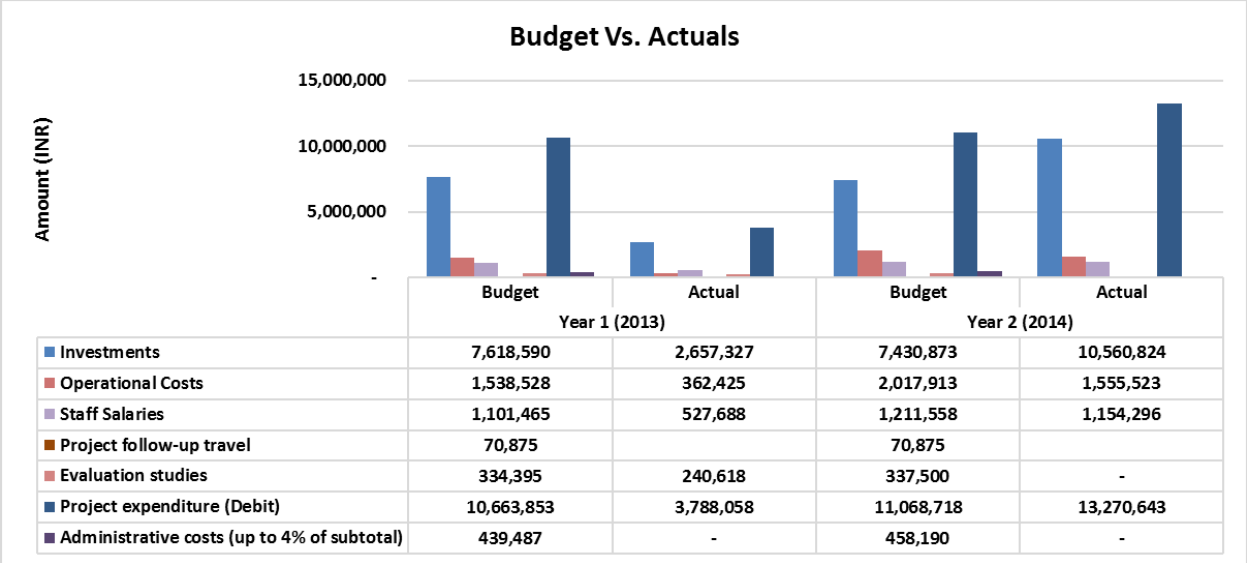
Livestock

When asked about the livestock in their houses, 55% of the households reported to having livestock at midline as compared to 35% at baseline. The maximum increase was reported in

poultry; 84 households reported to having 3 or more poultry as compared to 23 households in the baseline. For the other animals there was marginal increase between baseline and midline.

7.4 Efficiency

This section analyzes the funds utilized by the project as against planned targets and also how the resources were used to achieve the intended targets.



	Year 1 (2013)		Year 2 (2014)	
	Budget	Actual	Budget	Actual
Investments	7,618,590	2,657,327	7,430,873	10,560,824
Operational Costs	1,538,528	362,425	2,017,913	1,555,523
Staff Salaries	1,101,465	527,688	1,211,558	1,154,296
Project follow-up travel	70,875		70,875	
Evaluation studies	334,395	240,618	337,500	-
Project expenditure (Debit)	10,663,853	3,788,058	11,068,718	13,270,643
Administrative costs (up to 4% of subtotal)	439,487	-	458,190	-

Figure 6: Budget vs. Actuals

The above graph shows the budget utilized as against the planned targets for each year. It can be seen that the budget utilization is very low for the first year at 33%, and slightly above the planned targets for the second year at 111%. The low utilization in the first year was attributed to late start by the project (first month in the second quarter) which prompted to postpone some of the activities to second year. This was properly communicated to the donor agencies in the annual narrative report 2013 and got approved. There are no deviations observed in spending of resources for its intended purposes. Budget overshot in some of the activities such as well deepening, construction of feeder channels and toilets was met through Forex gains after getting prior approval from donor agency.

The following table shows the achievement of planned targets as of now.

Programme Activities	Target	Achieved	%
1. Training/ Exposure	10,771	7,950	74%
2. Joint Farming	100	36	36%
3. Micro Enterprises	100	12	12%
4. Crop Assistance	600	593	99%
5. Small start up	250	9	4%
6. Provision of Seeds	200	79	40%
7. Assistance for Construction of Toilet	250	250	100%
8. Goat	200	194	97%
9. Integrated farm visit - children & youtl	400	352	88%
Total	1,700	1,173	69%
Soil and Water conservation Works			
1. Repair of lakes (Nos.)	8	8	100%
2. Repair of ponds (Nos.)	4	4	100%
3. Rehabilitation of Canals (mtr)	3,000	3,450	115%
4. Extension of feeder channnel (mtrs)	1,000	850	85%
5. Repair of Sluices (Nos.)	15	15	100%
6. Repair of Earth walls (mtrs)	4,000	3,800	95%
7. Vetiver grasss seedlings	5,000	3,700	74%
8. Tree nurseries	6,000	6,500	108%
Total	19,027	18,327	96%

Table 8: Efficiency- Target vs Actual

As it can be seen from the above table, the project has already met most of the targets related to soil and water conservation works, however lagging behind in some programme activities especially setting up of micro enterprises, small start-ups, joint farming and provision of seeds. The study assessed that the hindering factors which include inadequate resource allocation for enterprises, risks factors associated with marketing and credit repayment etc. contribute to this slow progress. The project need to make efforts for addressing the risks factors as well rework the cost-benefit ratio for these enterprises based on which the resources can be reallocated in the coming years. The seeds bank concept promoted by the project faced many challenges such as lack of technical knowhow, inferior quality seeds supplied by the farmers (admixtures), poor germination of seeds etc. WMC aware of this situation and has reworked the strategies to link the seeds bank to the National Seeds Corporation and other stakes.

As against the target of 400 children, the project has facilitated 352 children and youth to visit the children-led ecological learning centre at Shankar Nagar wherein children have learnt basic soil and water conservation practices, role of minor millets in the context of food security, use of traditional health practices corresponding to herbal plants, alternative energy sources such as bio-

gas, solar pumps, solar lights, organic composting methods, improved cultivation methods and climate mitigation practices. These children have passed on this knowledge to their parents who in turn shared to wider audience through self-help groups.

7.5 Emerging Impacts

As it is too early to measure the impacts of the intervention, the study tried to capture the signs of changes (emerging impacts) through qualitative methods.

At the household level:

1. Improved income due to increase in cultivable area, productivity, reduction in cost of production and diversification of income sources (livestock). Increased income reported by beneficiaries in all the three panchayats (Udayanampatti, Agathakulam and Pillaiyarnatham) where PRA were conducted
2. Reduction in accessing loans from informal sources such as local money lenders, friends and relatives for higher interest rates, reported across all three panchayats
3. Reduction in occupational migration reported at least by three months in a year, especially in Pillaiyarnatham panchayat. There has been reducing trend of children dropping out of school due to migration.
4. Improved safety and security of children, especially for girls and reduction in communicable diseases attributed to toilet construction and awareness by project and facilitation govt. sanitation programmes

At the village level

1. About 20% to 25% of barren lands in the sampled panchayats have been brought under cultivation additionally because of the soil and water conservation measures taken up by the project. There is also increased availability of water for irrigation from 1-2 months at baseline to 3-4 months now. These have been attributed to project interventions.
2. Impacts on cultivation practices (good agricultural practices) and efficient management of natural resources are yet to emerge. Few reported transitional change from inorganic cultivation practices to organic methods
3. Community based institutions to govern, manage and ensure equitable access to common property resources are in place, but need to be strengthened further on the sustainable livelihoods support activities

7.6 Sustainability

The sustainability of the project can be looked at from four angles; 1) Institutional sustainability (capacities of the community based institutions such as WMC, GS, WMS), 2) Financial sustainability of the project beyond withdrawal of support from donors, 3) Technical sustainability of the project interventions (renovation and other SWC works), and 4) Environmental sustainability.

Institutional Sustainability:

The capacities of the CBOs promoted by the project was assessed using Group Self-Assessment tool. The tool measures the capacities/performance in a five point scale with 1 being embryonic stage (nascent) and 5 being self-directed stage (ability to do without any external support). The assessment parameters are majorly categorized as governance, functioning, programme involvement, linkages and resource mobilization capacities. The following graphs show the current level of capacities of each of the CBO as assessed by the study.

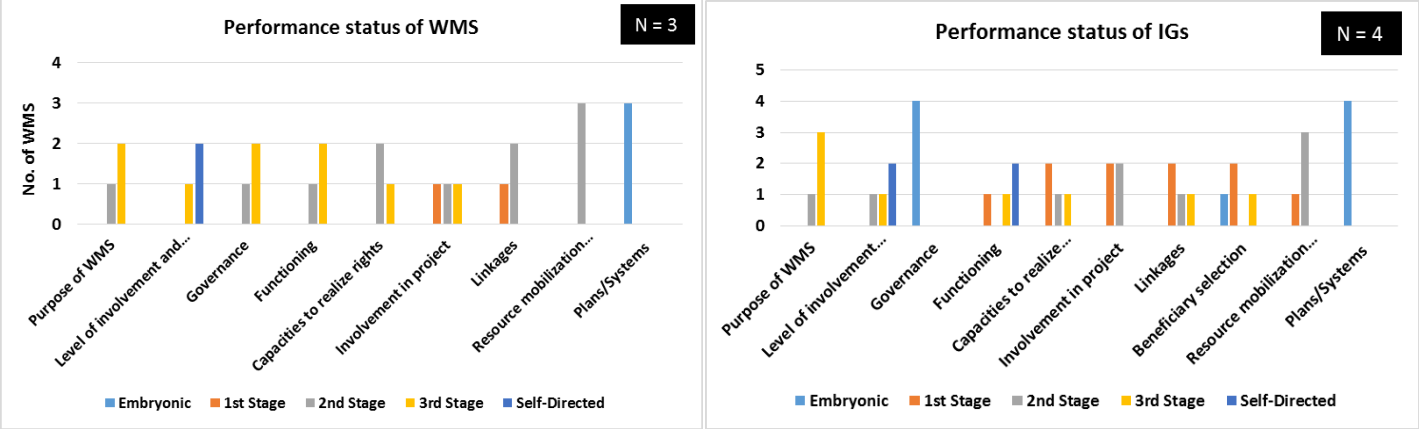


Figure 7 – Performance status of WMS and IGs

It can be seen that the capacity status of both WMS and IGs are either in the 2nd stage or 3rd stage for most assessment parameters, which is a good sign of progress at this stage of the project. However, the areas of improvements to be looked upon by the project in the coming years are developing plans (both long and short term plans) and systems for the CBOs and building their capacities on resources mobilization and management. Ownership and involvement in the project activities and beneficiary selection in the case of IGs are also the important areas that the project need to look into.

The performance status of Watershed Management Committee, the apex body federating the grass root level institutions is given below.

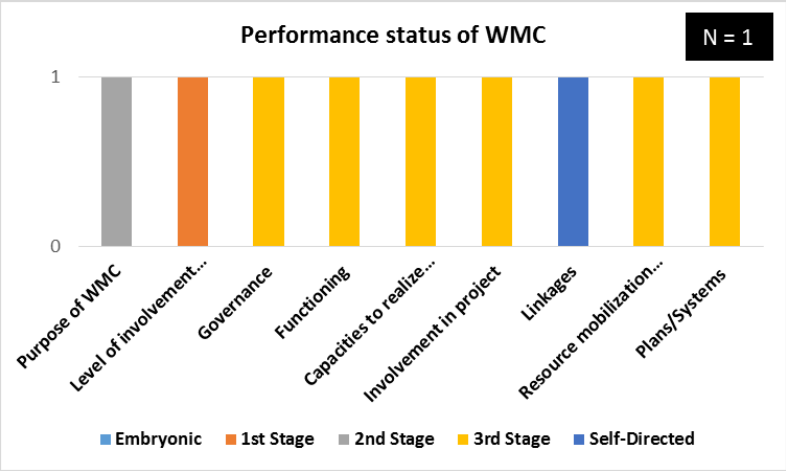


Figure 8: Performance Status of WMC

The performance of WMC on all assessment parameters except the understanding on purpose of WMC, which is not uniform across all members, is good. It is important that all members should be aware, have uniform understanding of the objectives of WMC, involve themselves actively in the WMC functioning and the project has to ensure these in the coming years.

Financial Sustainability:

The project has provided Revolving Fund(RF) assistance to the tune of Rs. 45,90,000(out of an allocated total of Rs. 66,21,000) for the Interest Groups,routed through WMC. This fund has been efficiently utilized for various income generation activities such as goat rearing, crop assistance etc. and a nominal interest rate (12% p.a) has been charged on the loans. The corpus amount generated by WMC through the RF facilitation, which includes total outstanding loan, accrued interestetc. is Rs. 70,09,875as of now and it has the potential to grow further towards end of the project. In addition, the project has also established linkages with institutions like KVK, Dept. of Agri. Engineering, and local administration for any future resource and technical support. Overall, the progress is significant in moving towards financial sustainability.

Technical Sustainability:

The study assessed that the infrastructure development works undertaken by the project such as renovation of tanks, clearance of waterways, construction of bunds, tree planting etc. are as per the technical standards, and specifications mentioned in the project proposal. The project has done a detailed topography study at the start with the support of an external consultant and used it for the development works. The quality of toilets constructed by the project are also assessed to be meeting the standards and needs of the target beneficiaries. The project has to ensure that the community institutions promoted and corpus fund with WMC should be effectively utilized for future maintenance of these structures.

Environment Sustainability:

The package of practices promoted by the project such as organic farming practices, soil and water conservation methods etc. are environment friendly. The project has also designed carefully its interventions (income generation programmes, awareness programmes) to create positive impacts on the environment. Given the focus and activities, it can be said that the project will not make any adverse impacts on the environment, but will contribute to sustainable development.

7.7 Project Management Systems

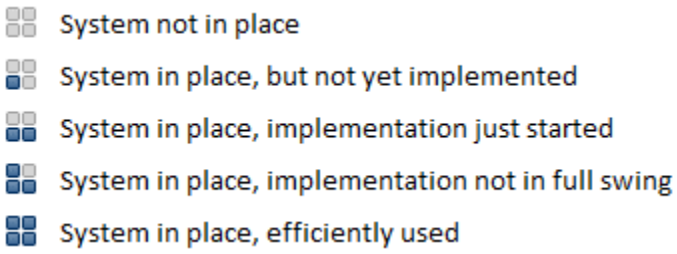
The project has put in place a robust monitoring system with the support of an independent consultant, Dr. Arumugam, but yet to be implemented in full swing. The prototype system developed for the projectis capable of capturing all critical elements that are to be monitored such as inputs-activities, processes, results, outcomes and impacts. Management Information System captures the household profile, village profile and CBO profiles, but need to be updated and made dynamic. Currently, monthly review meetings are conducted regularly wherein progress of the previous month activities are discussed, quality of execution, achievement of results are reflected and plan for the next month prepared. The documentation and filing of various project related reports are adequate.

The project has adopted Before-After-Control-Treatment (BACT) design for impact evaluation and conducted a detailed baseline study and developed benchmark on the key performance indicators such as income, productivity, cost of production, adoption of practices etc. The design and methodology of impact evaluation assessed to be rigorous enough to capture the impacts and outcomeslevel changes and also what would not have happened without project's intervention. The table below shows the overall status of project

	Project Management (Low --->High)					
1	Project Implementation Plan					■
2	Inputs-Activity monitoring				■	
3	Process quality monitoring			■		
4	Results monitoring		■			
5	Outcomes and impact monitoring		■			
6	Monitoring of cross-cutting issues		■			
7	Financial monitoring				■	
8	HR - capacities				■	

management systems and its utilization.

Table 9 – Status of Project Management Systems



As for human resources, the project has qualified and experienced team in place. More than 80% of the staff has over a decade experience in development projects, especially in relevance to this project. The staff attrition rate during the last two years of project implementation is low. The roles and responsibilities of staff at various levels are also clearly defined and adhered. However, the staff capacity building efforts seems to be limited especially on the areas of sustainable livelihoods promotion and efficient project management.

8. Conclusions

Overall, the project is highly relevant with its objectives and strategies being coherent and appropriate to the status and needs of communities, the local context in project location, the opportunities and good practices in empowerment and self-help approaches to sustainable development. The evidences from the baseline study confirms the pre-project situation of the area and the target communities, and therefore the relevant of this project – (a) the socio-economic status of target population is low; (b) the region is rainfed and population is primarily dependent on agriculture and allied; (c) very poor management of water resources; (d) practice of occupational migration; (d) poor access to sanitation facilities.Given this situation, the project focuses on improving the livelihoods, focusing on the agriculture and allied livelihoods, using a community-led participatory approach.

Addressing primarily the natural resources critical for agri-based livelihoods, i.e. soil, water and land, and combining this with the diversified option to supplement income and building resilience of farmers seems very relevant. The project also addresses the key concern of sanitation at the household level which is a big area of concern particularly for the children and women. The overall implementation approach is through community-based institutions with the implementation partner being facilitator, increasing the potential for sustaining benefits. Engaging with other key stakeholders at the community level, local governance and government departments are a part of the strategy to ensure long-term support and sustenance of the community institutions. Three key areas that could have been addressed better to improve the relevance are – (a) extent of coverage, in terms of covering higher proportion of people receiving benefits; (b) engagement with the markets, particularly for increasing returns for the harvest; and (c) more engagement of the youth for enterprises and employment, given that the work is largely in the space of livelihoods.

As for delivery of planned activities against these well laid out strategies, the project has done well with respect to soil and water conservation related works, community institutions, sanitation, but lagging behind in achieving targets for a few activities, like setting up of micro enterprises and joint farming, largely landless focused. While these activities are critical, as the target groups are more vulnerable (landless), there is a need to develop practical strategies in this area to ensure implementation.

Against the agreed set of results (outputs) of the project, achievements are significant for most areas as measured through key performance indicators of the result assessment framework.

- The reported availability of water for irrigation has increased from the baseline situation of 1-2 months to 3-5 months on an average across all sources, and significantly from ponds. Due to this and other water conservation initiatives, there has been an increase land under cultivation by about 20% to 25%.
- Though there is an improvement in number of famers adopting good agricultural practices (including organic methods), the awareness and adoption levels on natural resources management still need improvements.

- There is notable increase in the awareness levels and availing of various government schemes especially agriculture credit facilities, livestock and state health insurance schemes.
- The percentage of households migrating for occupational reasons has come down from 6% at baseline to 4% now. Also, there is a reduction in the percentage of migrating households as families (taking their children along with them) have substantially 29% at baseline to nil.
- There is a marked increase in percentage of households accessing toilets from 2% at baseline to 20% now.
- There is a significant increase in the percentage of households accessing common property resources such as grazing lands, water sources and common infrastructure between baseline and midline. The percentage of households' access grazing lands has increased from 31% to 58%; water resources from 54% to 67% and common infrastructure from 19% to 61%.
- The cost of cultivation of major crops (Rs./Acre) such as blackgram and ground nut has come down from Rs. 7,113 to Rs. 5,667 and Rs. 13,285 to Rs. 11,709 respectively from baseline to midline. However, the cost of production for paddy and green gram has increased. Ideally the comparison on cost of cultivation has to be made between treatment and control farmers as there can be possible influence of natural inflation over the years. The productivity of paddy and green gram has increased from 1,418 kg/acre to 1,633 kg/acre and 79 kg/acre to 185 kg/acre. The annual household level income per annum has increased from Rs. 18, 324 at baseline to Rs. 32, 108, an increase of 75%. However, there may be natural inflation as explained in the case of cost of cultivation and hence the comparison of treatment and control farmers will reveal the actual increase by project interventions. As the study did not cover control group, this comparison is not possible.

In terms of financials, the project has under-utilized the allocated resources during the first year due to delayed start of project implementation and slightly overshot the planned targets during the second year. There are no deviations in terms of spending of resources for its intended purposes. The budget utilized to achieve the physical targets and project objectives are appropriate and relevant.

Impacts due to project interventions are emerging both at households and village levels, captured largely through qualitative methods. Some of the impacts at household levels are 1) increased income due to productivity increase, reduction in cost and diversified livelihoods options 2) increased access to credit from formal sources with low cost of credit 3) reduction in migration and 4) increased safety and security of children through improved access to toilets. Some of the impacts at village levels are 1) increased number of lands brought under cultivation due to

increased availability of water for irrigation 2) community based institutions in place and involve in programme.

The community institutions promoted by the project viz. Interest Groups, Watershed Management Sangams and Watershed Management Committee are relevant. The capacities of these institutions are assessed to be adequate at this stage of the project but needs improvements in the coming years in areas like resource mobilization and plans & systems. The project has made good progress in moving towards sustainability on the aspects of technical, institutional, financial and environmental. A number of suggestions have been given under recommendations (strategic pathway) to move forward.

The project management systems planned for the project seems adequate, but full scale implementation of all planned systems is to be undertaken with immediate effect. Currently, only the inputs-activity monitoring system is being practiced by the project with rigor.

Overall, the project has made significant progress against the assessment parameters and the following section provides suggestions and recommendations to improve the performance further.

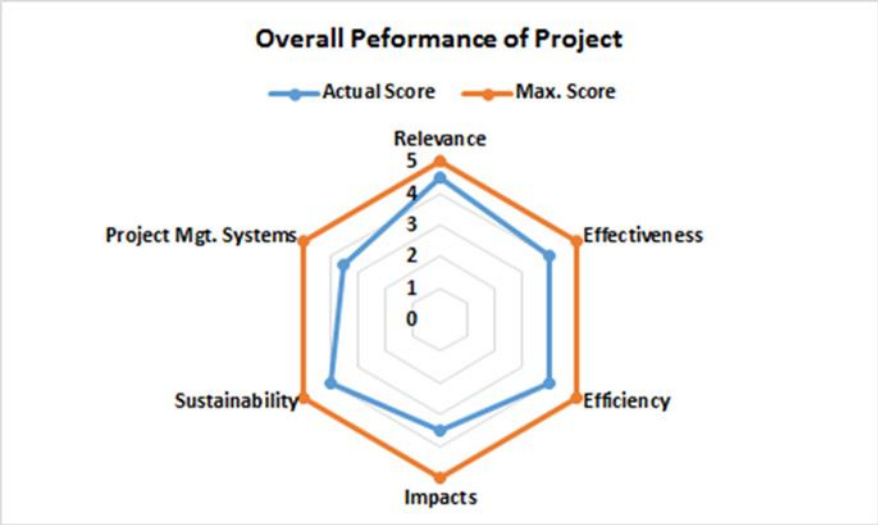


Figure 10: Overall Performance of the Project

9. Recommendations

Flowing from the assessment and reflections with the communities and programme team, the study team suggests the following towards improving the overall effectiveness and sustainability of the project. As the project has completed half of its allotted duration, there is a need to look at both the programme and strategic aspects.

Therefore, the suggestions provided are in two parts: Operational and Strategic. The operational suggestions are related to ensuring that how the current strategies and planned activities in the project are delivered well, and the Strategic ones are the areas where the project can think of investing its efforts to bring in new ideas and approaches that have potential or deeper and larger impact, which will increase the potential for sustainability manifolds.

Suggestions related to Operations:

1. Accelerate the work on promoting micro-enterprises and small start-up for the landless and marginal farmers. Remove the barrier of uptake by looking at appropriate per-unit financing (probably increasing it from Rs. 2,500 per unit to practical levels), and providing intensive enterprise enablers support through a set of non-farm enterprise team. Helping them to identify enterprises, undertake community-friendly business plans, hand-holding support to run these enterprises, and more importantly ways to engage with the market are critical inputs to be provided by the project. A change in the strategy, team expertise and allocation is required to ensure that this component is delivered well.
2. Revisit and revise the strategy on seeds bank, as this is one of the critical inputs at the farm level to ensure higher productivity and incomes. Working with the exiting reputed government/ quasi-government agency through a linkage-model be the best way forward. Linkages with the National Seeds Corporation (NSC) at Kappalur can be explored, which can provide opportunities through existing schemes. The project can also engage with seeds certification department of the government, NABARD and Tamil Nadu Agricultural University (TNAU) to facilitate the same.
3. Increase the uptake of the sustainable natural resource management practices by farmers by modifying and improving current awareness building strategies, to move towards behavior change communication strategies. Use of locally appropriate ICT based technology (such as Digital Green videos), assessment of the barriers to adoption and designing focused communication around those, incentivizing adoption through linkage with credit, schemes and market opportunities, etc. to be explored.
4. Scale up further and explore new opportunities in the access to the government schemes and programmes on variety of areas. Particular focus should be on schemes like irrigation equipment, seeds/saplings subsidy schemes, land development schemes which saw a low up-take by farmers. Setting up a ‘social protection facilitation desk’ at the cluster/ federation level in which each family-wise eligibility, access to civic identity, schemes and programmes can be tracked and accordingly facilitated. This kind of a helpdesk will also help to aggregate demand and undertake advocacy with variety of departments.

5. Intensify work by covering more households under the sanitation programme, particularly construction and use of toilets. Continue and accelerate the linkage with the government programmes, with their renewed focus through Swachh Bharat Programme. Also, within the Federation, facilitate policies to prioritise credit products for construction of toilets by households themselves, without depending on the government schemes.
6. Stop pursuing joint farming idea as it is faced with a number of challenges, such as inadequate returns for leaseholders and hence not willing to lease their lands, inability of the lessees to make additional investments to bring back the lands for cultivation (as most lands leased out are unsuitable for cultivation), risks of monsoon failures etc. Explore allied activities instead of joint farming.
7. Initiate market engagements through communities as this is the aspirations emerging, and without the market engagements deriving more incomes from the value chain is impossible. Engaging with markets/ market players is not easy, particularly for facilitating organisations that are working on the community side/ empowerment approaches. However, there are plenty of opportunities in the sector wherein Producer Organisations/ Companies are encouraged and this is an area that the project needs to plan to ensure sustainable increases in incomes for farmers, coming from the value chains. This component is explained in detail under the suggestions on strategic pathways.
8. Develop a long-term sustainable institutional plan integrating variety of community institutions that are promoted by the project, to ensure that different roles envisaged are performed by different community institutions (allowed legally and functionally; and accordingly capacitated), and there is a link to support of RCPDS as an institution to ensure support. This component is explained in detail under the suggestions on strategic pathways.
9. Ensure full-scale implementation of the Project Management System, going beyond the basic input-activity monitoring. Process quality monitoring system is critical and this needs to be done once a quarter at least. The results tracking should be taken up bi-annually and there is a need to facilitate learning forum annually along with annual review and planning meetings.

Suggestions on Strategic Pathway:

As can be seen from the above, the project has enabled access to a number of services for the households, such as financing, awareness and access to soil and water conservation technologies, practices, toilets, allied activities, seed and farm inputs, access to key entitlements and schemes of the government, etc. It is also clear that these services are helping the communities to strengthen their livelihoods. Therefore, these community-friendly and appropriate services need to continue. However, as the support from donors is for specific period under the project, there

is a need to create sustainable institutional mechanisms to continue to provide these services to farmers. To this effect, the project has done well to develop numbers of Community Institutions (such as SHGs, WDC, WMC, etc.) with each institution expected to perform a specific role.

Building on the assessment and the base created by the project, few suggestions for moving forward is provided here. While planning way forward for institutional framework and strategies, the key considerations that Project needs to plan are:

- Continuing the critical services that have led to impacts during the last two years – investments in lands and water (through community institutional approach), continuous awareness and capacity building on good agricultural practices
- Intensification and deepening of impacts through add-on services – marketing (more critical as expressed by WMC members), agriculture focused credit/financing, and other value chain investments (for processing, commodity trading, seeds, etc.)
- Expanding scale of operations (beyond just these project villages) which can leverage costs and improve economies of scale and to sustain the key community and resource institutions that are critical for support

There are a number of strengths that project has to move forward. The resources and the establishments that the project has built so far are listed here, and these will be key bases to build future:

- Community institutions at various levels,
- Community investment funds of Rs. 66 lakh
- Pre-tested package of practices,
- Field base of CFCD intervention in the neighbourhood and
- RCPDS infrastructure and commitment for long-term support; and the available opportunities with government and other actors

There are plenty of opportunities available (both within RCPDS, and outside in the sector) to leverage, and these are:

- Producer institutions – focus, incentives, support systems and opportunities (Grant equity, resource institutions, credit guarantee) – SFAC, NABARD, PROCIF…
- Producer company – under companies Act, but built on cooperative principles and model
- Financing institutions, increasing focus for credit linkages for producer organisations
- E-based marketing, direct corporate linkages for farmers' institutions
- Huge need for support in nearby areas (Narikudi)

- Increased focus on climate change investments (land, water and bio-diversity critical areas)
- KNH too looking at Producer Institutions for sustaining livelihood investments, and deepening impact

By looking through these, the strategic pathway for the Project is suggested.

1. Ensure strengthening of the community institutions into strong institutional structures, with clear functionality, legal form, roles and more importantly a kind of formal network with RCPDS as the key resource agency supporting this for a long-term. This will require:
    - FIG based Watershed Management Committees – focus on land and water investments; continue to be a society and handle revolving credit + POPs – with very low or no interest; but look for long-term investment in common property + social investments – also government entitlements (Federated Structure, under Societies/ Trust)
    - Livelihood focussed producer organisation – Agri Producers' Company – to be formed – under Companies Act – Inputs, Marketing, Credit, Value Addition (Business Oriented) – Have a resource institution good in business to support and partner with facilitating organisation (such as SFAC RIs, NABARD RIs) – Community Business Institution
    - Both these community organisations along with RCPDS enter into a Memorandum of Understanding for working together for the benefit of communities in the long-run.
2. Programme component-wise, many suggestions are given under operations. More on the strategic side are:
    - Intensifying and deepening work in existing BMZ-KNH Project supported areas
    - Expanding base – both new areas and CFCD project institutions so that reasonable scale is reached for sustaining future community initiatives in marketing, credit and advocacy efforts.
3. RCPDS – continues to be a support institution, with a tripartite agreement – People-Professional Partnership
    - MOU between RCPDS – WMC - APC, with a part of the profits flowing back to the child development work, i.e the impact which KNH is interested in
    - Producer Institutions and WMC – pay for the cost of facilitation and children level investments from their profits
4. Establish strong linkages with SFAC, NABARD, NABFINs, FWWB, Etc. – for continued support for the initiative, directly or through established resource/ support institutions

Overall, a new-age model under KNH supported projects can emerge out of this important project. This will be focusing on livelihood institutions to ensure and sustain the benefit of economic development beyond SHG-based empowerment, and ensuring flowing back of economic benefit to the child development, through an effective institutional mechanism. The suggested community institutional model is given below.

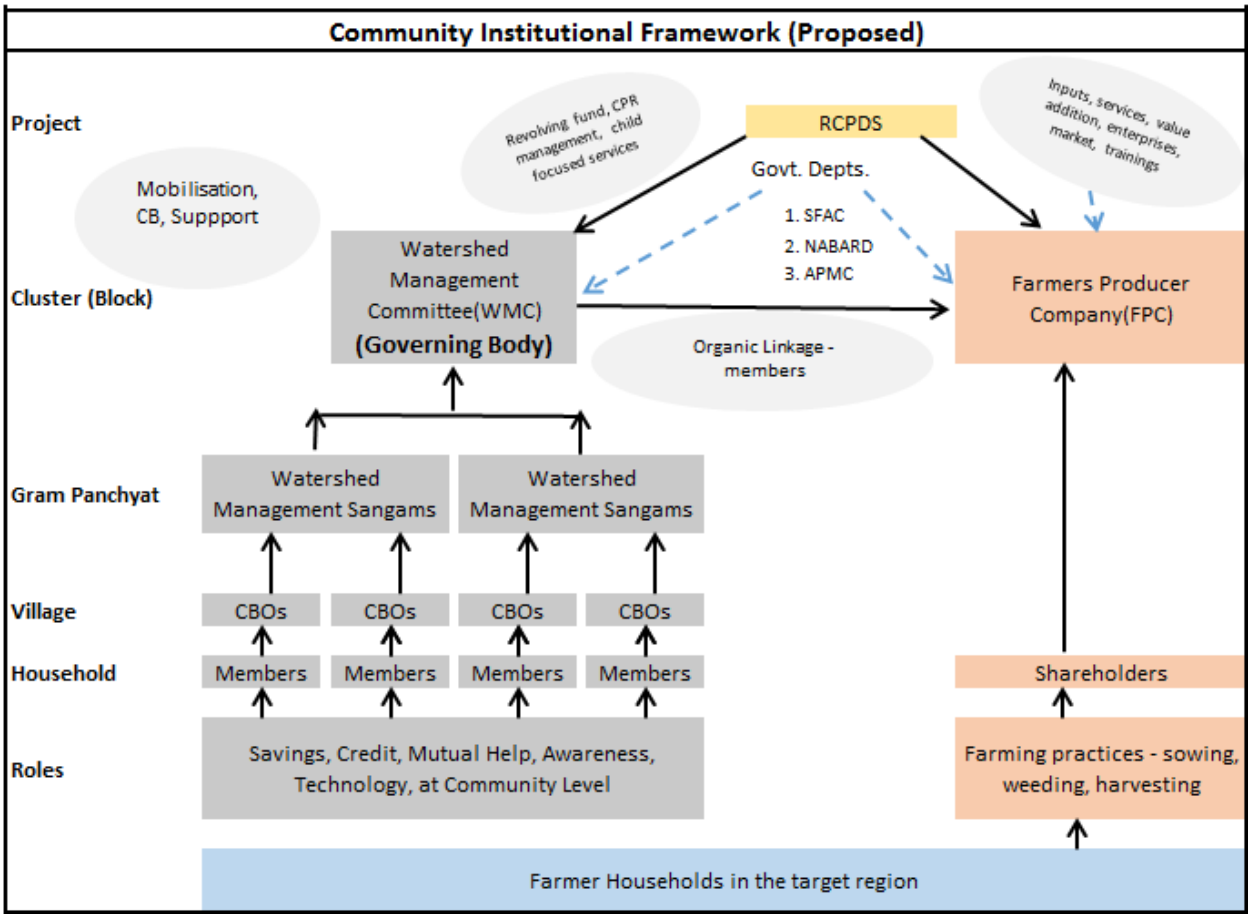


Figure 11: Community Institution Framework

10. Annexes

1) PRA documentation
2) ToR
3) Study tools