



**Local Infrastructure for Livelihood
Improvement L I L I**

External Review

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Authors:

Markus Engler
Kapil Ghimire

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List of Acronyms

ADB	Asian Development Bank
CIP	Community Irrigation Project
DADO	District Agricultural Development Office
DAG	Disadvantaged Group
DDC	District Development Committee
DoLIDAR	Department of Local Infrastructures Development and Agricultural Roads
DRILL	Demand-led Rural Infrastructure at Local Level
DTO	District Technical Office / District Technical Officer
ER	External Review
FMIS	Farmer Managed Irrigation Systems
GoN	Government of Nepal
Helvetas	Helvetas / Swiss Intercooperation (<i>in the report the term Helvetas is used</i>)
HMRP	Hill Maize Research Project
HGP	Home Gardening Project
IS	Irrigation Scheme
LILI	Local Infrastructure for Livelihood Improvement
LINK	Linking Smallholders with Local Institutions and Markets
LRP	Local Resource Person
LSP	Local Service Provider
MoA	Ministry of Agriculture
MoFALD	Ministry of Federal Affairs and Local Development
Mol	Ministry of Irrigation
NPO	National Program Officer
PAF	Poverty Alleviation Fund
RAP	Rural Access Program
SC	Steering Committee
SDC	Swiss Agency for Development and Cooperation
SSMP	Sustainable Soil Management Project
O & M	Operation and Maintenance
OM	Outcome Monitoring
PSU	Project Support Unit
VDC	Village Development Committee

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Kapil Ghimire

Markus Engler

Summary

Background, Purpose, Method

LILI (Local Infrastructure for Livelihood Improvement) was conceived by Helvetas in 2004. Phase II from August 2009 to July 2013 is fully funded by SDC. The main purpose of LILI is to increase agricultural productivity through farmer managed irrigation systems (FMIS) thereby improving income and food sufficiency of the rural communities and in particular of DAGs.

The External Review of phase II is to provide a strategic assessment of "changes in the lives of the beneficiaries" and of the attribution of related achievements to the project's interventions.

Field visits to 5 schemes were the main source of information to assess 'impacts' of the project. Therefore, given the timeframe of the review, evidence is only possible by example.

Impact *Is LILI doing the right thing?*

Farmers are unanimously very positive about the direct and indirect benefits. The irrigation schemes help to increase food sufficiency by 50 to 100%. Increased and diversified production improves the diet and through marketing of surplus, farmers can increase income partly by more than 100%. This makes farmers less dependent on migration.

The availability of water (for irrigation) is of outstanding importance for improving livelihoods of farmers. For other inputs to agricultural production they are less dependent on external support.

At district level LILI's approach of decentralized funding, as compared to the sector-wise funding and implementation with separate budget allocation through different ministries, is appreciated.

At central level, Ministry and Department are positive about the idea of developing FMIS as a sub-sector, but concrete action in this line is still modest.

Relevance

The relevance of LILI is high in particular for communities. DDCs and Central Government agencies consider the approach as relevant since it provides a viable model for addressing the priorities of marginalized farmers. It is in line

with the District Development Plans and with policy options being discussed for the new Agriculture Development Strategy.

Effectiveness *Is LILI doing the thing right?*

269 completed schemes and 95 ongoing schemes covering 2'700 hectares of land increase irrigated land by 2347 ha or by about 17% in the 8 working districts. The approach is contributing to a more equitable distribution of benefits. Integration into DDC planning and implementation, scaling-up, improved coordination at central level and the effectiveness of the provision of supplementary inputs and services require attention.

Sustainability

Improvements of livelihood are so substantial that farmers will have a genuine interest to maintain them. O&M arrangements are well developed and introduced to ensure sustainability of the schemes to the extent possible.

Efficiency

Operational performance at district level is good, although compromised by institutional constraints and lack of clear roles. At central level progress of institutionalizing the approach is slow.

Conclusions

LILI is a relevant and effective approach which deserves to be developed further, focusing on:

- Scaling-up
- Optimizing / maximizing impact

Recommendations

It is recommended to continue the project with a longer term perspective and commitment both on the part of donor and of the government as a basis for developing a sub-sector approach.

The sub-sector approach should be introduced in stages.

The project strategy should be adjusted a) to offer optimal 'backward and forward linkages' to farmers, b) to scale-up and c) to strengthen institutional capacity at district and central level and d) to develop a sub-sector approach.

1 Background & Method

1.1 Background

In principal LILI (Local Infrastructure for Livelihood Improvement) was initiated by Helvetas¹ in 2004 as a “build-up phase” then named 'Demand-led Rural Infrastructure at Local Level' (DRILL). Its main purpose was to increase agricultural productivity through farmer managed irrigation systems (FMIS) thereby improving income and food sufficiency of the rural communities residing in remote areas in the Swiss geographical cluster districts. The project provided better access to water for irrigation in selected food deficit areas and support to improving the physical condition of public buildings, such as primary schools, health posts within the Helvetas cluster districts.

The project aimed to achieve quick increase of income levels through the introduction of cash crops and increased cropping intensities by supporting rural communities, local governance institutions and NGOs in the construction and maintenance of small sized FMIS. In addition, vegetable collection and storage centers were promoted for the efficient gross sale and processing of off-season vegetables through farmers' cooperatives.

In August 2006 a three years implementation phase of LILI started, based on a bi-lateral agreement between the Government of Nepal and the Swiss Agency for Development and Cooperation (SDC), signed on March 2nd, 2007. This agreement was complemented by the strategic partnership agreement between Helvetas Nepal and DFID. Phase I was funded by SDC (~64%) and co-funded by Helvetas under its strategic partnership agreement with DFID (~36%).

Based on internal and external assessments the focus for the current second phase of LILI was put on livelihood improvements through food sufficiency and increased income. The previous diversification with construction of school buildings and health posts was discontinued.

Phase II started in August 2009 and will end in July 2013. External funding of this phase is fully covered by SDC. Currently it is the only FMIS project within the Department of Local Infrastructure and Agricultural Roads (DoLIDAR) / Ministry of Federal Affairs and Local Development (MoFALD) and in this sub-sector besides the Community Irrigation Project funded by ADB which is currently in the start-up phase.

1.2 Purpose & Objectives of Evaluation

1.2.1 Purpose

An External Review (ER) is foreseen in the project document of phase II with the purpose of getting a strategic assessment of "changes in the lives of the beneficiaries" and of the attribution of related achievements to the project's interventions. Thereby the ER was mandated to consider in particular the issues of (out-)migration and dwindling interest in subsistence agriculture. Based on the assessment the ER is to provide the Government of Nepal (GoN) and Switzerland with (critical) lessons learnt and

¹ For the sake of readability the term Helvetas is used as short name of HELVETAS Swiss Intercooperation

recommendations for the future of Swiss engagement in small scale irrigation sub-sector promotion.

1.2.2 Objectives

The overall objective of the ER is to assess the relevance and effectiveness of LILI. Three specific objectives along with key questions (see Annex 1) specify the task in more detail.

- Objective 1: Project effectiveness and efficiency
- Objective 2: Project relevance and leverage for scaling up
- Objective 3: Recommendation for future orientation

1.3 Process and Methodology of Evaluation

1.3.1 Process

The External Review took place in Nepal from the September 17th to October 05th, 2012. It involved:

- a) A few days for briefings with SDC and Helvetas/LILI, discussions with all relevant decision makers from MoFALD, DoLIDAR, Department of Irrigation, presentation of the LILI-team's self-assessment, to get the national level actors' assessment of LILI's progress and management,
- b) A week of field visits in Ramechhap and Dailekh district to the project sites for physical verification and discussions with representatives from DDCs and VDCs, political parties, target groups (individuals, user groups), Local Service Providers and Local Resource Persons on their perception of LILI's effect on them,
- c) A week of further meetings, compilation of findings and debriefings. First preliminary results were discussed with SDC and Helvetas/LILI in separate meetings. The feed-back from these meetings was taken into consideration for a presentation of observations, findings and recommendations to a broader group of stakeholders, namely the MoFALD/DoLIDAR, MoI, MoA, SDC, Helvetas/LILI, etc. (see Annex 3).

1.3.2 Methodology

The ER-team relied on a desk study of available documents, checklists for interviews and focus group discussions. For assessing the views of the farmer groups the method of 'Most Significant Change' was applied in focus group discussions.

To cross-check and consolidate observations and findings, workshops with SDC and Helvetas/LILI after the field trip were instrumental to draw final conclusions. A de-briefing with a broad range of stakeholders served to communicate results and receive additional feed-back.

Limitations

The ToR ask for an assessment of impacts ("changes in the lives of beneficiaries"). Given the duration of the mission and the broad catalogue of issues to be addressed, this was obviously possible only by example and not by statistical evidence.

In an attempt to group the key questions according to the usual evaluation criteria, the report first covers the most pertinent question: "Is LILI doing the right thing", (i.e. impact and relevance) followed by the question: "Is LILI doing the things right", (i.e.

effectiveness, sustainability and efficiency). Whereas all questions are addressed, the extent to which they are answered varies according to the information available.

2 Review

2.1 Introduction

In line with the ToR and the specific concerns of SDC, the review focuses on impact and outcomes and their relevance for the various stakeholders, i.e. " is LILI doing the right thing?" These more strategic issues are supplemented with an assessment of the operational performance of the project. Recommendations emphasize the strategic aspects while operational issues will depend to some extent on the decisions taken on the basis of our recommendations.

2.2 Impact

Is 'LILI' doing the right thing?

2.2.1 Observations

The communities we met are unanimously very positive about the direct and indirect benefits they draw from the irrigation schemes. Direct benefits mentioned are increased production and greater variety of crops. This helps people to increase the period of food sufficiency by 50 to 100% (examples stated: 3 to 6 and 6 to 9 months). Staple cereals are partly replaced by cash crops or by vegetables. The latter are used for a healthier diet. Depending on the location the increased production allows farmers to market part of the crop. The farmers with whom we discussed reported considerable increments in *income* of 50 to 100 %. A study conducted by the project², shows that net incremental *benefits* for an average household³ are around NRS 11'000 against a baseline of NRS 5'000, i.e. an increase of more than 100%. Assuming that only part of the crop is marketed the incremental *income* is lower, which shows that the estimate of the farmers is realistic. Even more so because instead of spending money for buying vegetables, they earn money from selling part of the harvest.

Most farmers mention that the increase in income allows a better schooling of the children.

The 'Cucumber' Motorbyke



A young farmer spent 7 years in Malaysia. What he did not achieve then, he managed upon his return. The profit of 11 months cucumber production and marketing was sufficient to buy a motorbike.

The villagers in Dailekh, where seasonal migration to India is common, stated that most of the men benefiting from the new irrigation scheme (IS) stopped migrating. In Ramechhap, where migration is rather to Gulf and Asian countries, the improved situation for farming as a result of the IS was also mentioned as an economically viable alternative to migration. While these are authentic statements they do not say much about the quantitative effects. Considering the financial situation of the beneficiaries of LILI, it is likely that the impact is stronger in the case of seasonal migration to India.

² Post- Construction Monitoring Report, August 2010 – July 2011, Survey of 1052 households

³ Based on selection criteria nos. of Ropani / household

Women do experience an increase of workload due to meetings, managing the water, marketing and field work where men migrate. Apart from better mobilization of family resources they see little scope for changing the situation, but they balance it with the benefits they draw for instance from remittance.

From the discussions we understood that the success of groups supported by LILI in improving their livelihood has also a certain demonstration effect among the DAG communities, showing that they have a choice to improve their situation.

2.2.2 Findings

The perceived and the actual impact on the livelihoods of marginal farmers is obvious and significant. FMIS can provide a decisive if not the key 'ingredient' to improved agricultural production and by that to improving the situation of marginal households in rural areas. The question of the relative contribution of additional inputs such as extension services is discussed in 2.3.2. However, it is obvious that irrigation lays the foundation to the observed impact. There is reasonable evidence that the impact of the intervention is tangible enough for villagers to reduce migration, in particular among the more marginalized groups who, for financial reasons, usually depend on the more 'precarious' migration options.

2.3 Relevance

Is 'LILI' doing the right thing?

2.3.1 Observations

Community Level

When asked about the most significant change in their village and their lives over the past years, the response was basically the same in all villages – water! The priorities of other changes respectively of requirements for a decent livelihood are also similar in all villages. They follow somehow the logic of a value chain, starting with water and crops, i.e. agricultural production, followed by road access, first for general purpose and then for market access. The latter includes infrastructure such as collection centers. Agricultural inputs are not mentioned immediately after water, because farmers seem confident that with water and their own skills and means they can achieve already an important improvement.

Importance of changes

- Availability of water
 - New crops (vegetables)
 - Roads for access (to markets) and Trail bridges
 - Schools
 - Health (services)
-

Concerning the factors that led to the successful completion of the project, responses were similar, emphasizing that the financial and technical inputs were an important 'trigger' / incentive, but equally important was the "joining of forces" in the village and the own contribution, giving people the feeling that they can manage themselves. Villagers stated that establishing user committees is an important and necessary step for joint action in the construction and later the operation and maintenance of the schemes.

Village (VDC) and District (DDC) Level

Due to the focus on groups of marginal farmers and not on geographical coverage, the VDCs are not very much involved so far, but the Village Secretaries we met understand the potential of FMIS and the LILI-approach. District authorities who are directly involved

in the planning, funding and supervision consider LILI a suitable approach to be applied to the whole district. They see FMIS as an important and relevant contribution to the district's development as it has the potential to cover some 40% of small farm irrigation. Formally FMIS is one of the priority sectors of the District Periodic Plan and Annual District Development Plan. LILI falls under the priority areas for block grants distribution as per GoN Block Grants Management Guidelines (15% of the block grants to the agriculture sector).

The DDCs and VDCs show a strong interest to take the approach to all the VDCs, i.e. the whole district and ask for inclusion of poor but non-discriminated groups.

All political parties, in the discussions we had with them, 'subscribed' to the approach. Districts see an advantage of LILI's approach of decentralized funding as compared to the presently sector-wise funding and implementation with separate budget allocation through MOAC, MOI and MOFALD. Accordingly they are interested to expand FMIS to the entire district under a uniform approach.

Central Level

At central level, MOFALD / DoLIDAR is building up its irrigation section. MOFALD has issued 'Small Irrigation Project Implementation Guidelines' in the year 2010/11, with inputs from LILI and adopted a 'One Village One Pond' approach after observation of LILI interventions. A 'Small Irrigation Operation Manual' is under preparation by DoLIDAR with financial support from LILI.

Both Ministry and Department are positive about the idea of developing FMIS as a sub-sector but concrete steps to this end are not yet visible. Possible reasons are that prioritization of the increasing demand for FMIS and allocation of available resources is still taking place in a scattered way, influenced by strong pressure from various stakeholders. Moreover the irrigation section of DoLIDAR, although appreciative of the approach, is not (yet) adequately strengthened in terms of human resources and management capacity and the high priority given to road and bridge sector diverts attention and resources within the department.

Also the Ministry of Irrigation is open to a sub-sector approach with handing over responsibility of implementation of MoI-funded IS to other entities, i.e. DoLIDAR or DDC, but the idea still seems to be new to MoI and therefore no concepts exists.

2.3.2 Findings

The relevance of LILI-interventions is the most pertinent question according to the ToR and a particular concern of SDC. Relevance of the results needs to be seen against the perspectives of different stakeholders and their needs respectively their policies.

Communities, Target Group

Looking at the impacts mentioned, the availability of water for irrigation is highly relevant for farmers to improve their livelihood both in remote places and in road corridors. The fact, that projects funded by LILI need to show a positive Return on Investment⁴, is partly proof of the relevance but also of the economic viability of the approach.

⁴ One of the criteria for selection and based on parameters identified during the survey of schemes

A recent review of SDC's agricultural initiatives⁵ concludes though, that "... this focus on agricultural production may be too narrow and alternative livelihood activities (e.g. paid employment, enterprise management, livestock rearing, NTFPs cultivation, repair agricultural machineries, off-farm value-adding services of local agricultural products) that offer higher and/or more stable returns should be promoted". While these are valid points the bottom-line is that agricultural production, besides migration, will remain the main pillar for rural livelihood in large parts of Nepal for some time. Mainly because suitable framework conditions for the other strategies namely for off-farm economic activities will take time to evolve. At present it is difficult to imagine which sectors would have the potential to provide an option for "stepping out" of farming to a significant number of people in those areas where LILI works.

With regard to migration⁶ the information available suggests that the project is relevant in two ways. First, it has a proven potential to reduce dependence on 'precarious' migration. Second, given the trend that more and more Dalits acquire land as a result of migration⁷, the scope and relevance of the LILI-approach with its focus on DAGs will increase.

District and Central Level

The DDCs and Central Government agencies consider the approach as relevant since it provides a viable model for addressing the priorities of marginal farmers. It is in line with the District Development Plans, with policy options being discussed for the new Agriculture Development Strategy (i.e. food security, agricultural productivity, connectivity and resilience, sustainable production and resource management, improved land and water management and water allocation) and with the national agenda of poverty reduction.

LILI's relevance for the irrigation sector as a whole may be illustrated by the following figures: of the 700,000 ha of land with untapped irrigation potential, only 10-15,000 ha⁸ is brought under irrigation each year, which means that LILI currently contributes about 7% of this yearly addition, which is a substantial contribution considering the size of project.

Macro- / Socio-economic Perspective

From a macro perspective one can argue that economically the approach is not relevant, because it lacks the potential to add significantly to the overall economic development. Given the targeted approach defined by SDC (DAG and cluster approach), such a contribution can however not be expected beyond the village level. Considering the opportunity cost⁹ requires to look for viable alternatives. The "Assessment of Agricultural Initiatives (of SDC)" provides a list of such options (see para 'Communities, Target

⁵ Assessment of agricultural initiatives (of SDC) in Nepal, 1995 to 2011, Final Report, March 2012:

"the current portfolio of SDC support to agriculture provides a fairly narrow set of livelihood choices" because it "assumes that agricultural production and marketing are the most appropriate or realistic means for the poor and DAGs to achieve named impacts and consequently, provides limited support to assist (unviable?) smallholders to "step out" of subsistence crop cultivation and adopt alternative livelihood activities that offer higher and/or more stable returns.

⁶ Qualified statements on the interdependency of migration and the project are still difficult to make, because even the study commissioned by SDC does not clearly show whether its title "Everyone is leaving" holds true. We could not find substantiated evidence regarding trends of increasing or decreasing relevance of migration as a livelihood option.

⁷ See Chapter 4 of Study on 'Effects of Migration from Khotang District to the Gulf and Malaysia', J. Adhikari, M. Hopley, for SDC, Dec. 2011

⁸ 1015 thousand ha of additional land is being brought under irrigation each year. ... about 1.7 million ha is irrigable, but only ... 1 million is actually irrigated; World Bank; Appendix 4 of Paper on Food Security; 2009;

⁹ Opportunity cost: the benefits one could have received by taking an alternative action

Groups' above). While we agree that these options need to be exploited, it is safe to say that the cost of an already tested, effective approach are clearly lower than the investments required at this point for getting the alternative options to produce similar benefits. Moreover, agriculture cannot be substituted by, but is a base for most of the proposed options.

De-coupling of Land

"The fact is that despite currently visible trends, land still has to produce food and many other necessities for us. In the absence of a prosperous and vibrant agricultural economy, the dream of industrial progress is a hubris. Reviving productive land use is the only way ahead. The devaluation of land as a means of production has occurred over the two decades because of a series of choices we have made in public. Only through a series of different choices can we recouple the value of land with its life-enhancing potential. Not to do that would be suicidal."

Blog by Bhattarai, pursuing a PhD in Canada (Oct. 2012)

Considering alternatives for the sake of argument, support to small towns for creating new jobs is the most practical and immediate for income generation. However, the opportunity cost might still favor irrigated agriculture, because creating jobs requires a well-functioning local economy which in itself is still an ambitious task in rural Nepal. An altogether different though hypothetical option is a 'passive' approach, i.e. no longer investing into marginal areas. The obvious 'opportunity cost' of such an approach is increased internal migration to growth centers with consecutive impoverishment of migrants and pressure on the social services in these centers. Hence for socio-political considerations such as solidarity, social justice, avoiding social cost, support to even marginal rural areas is indispensable.

SDC Strategy

Given the goals and areas of intervention of SDC the impacts observed confirm that the project fits well into the portfolio. It is contributing specifically to improved livelihood and increased resilience of people, especially the disadvantaged groups (DAG) living in rural areas and small urban centers. In addition, LILI contributes substantially to the improved delivery of basic services by local Government agencies, which is part of SDC's goal.

2.4 Effectiveness

Is 'LILI' doing the things right?

2.4.1 Observations

Implementation of FMIS

With 269 schemes covering 2'010 hectares of land completed and 95 schemes ongoing the project is exceeding physical targets. The total of 307 FMIS completed in Phase I&II increased irrigated land by 2347 ha or $\approx 15\%$ in the 8 working districts by the end of July 2012. As per the farmer's account cropping intensity increased by 50 or even 100% and at the same time crop variety increased. On the part of SDC there is however a concern regarding the achievement of the targets set for cropping intensity, since it is considered the key indicator for the relevance of an FMIS project.

The visits to five schemes confirmed that they are operated by User Committees who manage to organize water distribution in an equitable manner. The composition of the UCs reflects the criteria for representation of discriminated groups. Maintenance funds are established and caretakers assigned. The visits confirmed the results of the post-construction monitoring¹⁰ in that maintenance is done in a functional manner. Apparently

¹⁰ Post Construction Monitoring Report, August 2010 – July 2011, LILI, August 2011

inputs and benefits are distributed equitable as none of the communities reported on related conflicts.

The communities visited, showed a strong dynamic boosted by the project, stimulating new ideas such as selling surplus water (during night) or providing loans out of the maintenance fund.

The farmers have access to agricultural services either through SDC/Helvetas projects (SSMP, VSP), a link established by the project, or through DADO in a few cases and through self-organized contacts (e.g. with lead farmers).

There are cases where technical issues were raised such as quality of design, durability of pond lining, alignment and lining of canals. The project is well aware of these issues and is working on solutions.

Capacity to Develop FMIS at District Level

In the current, second phase the implementation is to a great extent integrated in regular DDC-procedures. The selection process introduced by LILI is accepted and considered transparent by the DDCs (respectively political parties). The DDCs contribute funds while LILI channels its contribution through the District Development Funds. The District Technical Offices in principle involve in supervision and quality assurance together with LILI-staff. However, the response of DTOs and interaction with LILI-staff varies depending on the interest of the DTOs¹¹ and the capacity of LILI-staff to fulfill their role. There is an ambiguity regarding implementation versus technical assistance role, which is balanced by a strong commitment on the part of most LILI-staff. The appreciation of their inputs by DDC-staff indicates a certain effect on capacity development, but the short visits did not reveal how substantial and effective this is.

Local Service Providers and Local Resource Persons play an important role in the implementation of the project both for technical support and social mobilization. The user groups were mostly satisfied with their services. LILI together with the DDC and other Helvetas projects is evaluating the performance of LSP's and LRPs annually based on an evaluation guideline. The LSPs and the LRPs are contracted by different parties (DDC, VDC, projects) but there is no systematic exchange among these clients about the quality of services received, nor is there a set standard. One example is an NGO which did not get an extension of contract by one Helvetas project on the grounds of insufficient quality, but later was contracted by another Helvetas project. On a sideline: the review team observed the leaders of some NGOs, during public meetings, which raised doubts about their attitude being suitable for promoting the principles of the project.

An important element of the project is to link the farmers with agricultural services and with markets. To this end LILI is coordinating to the extent possible with other SDC & Helvetas projects (mainly LINK, SSMP, HMRP, VSP, HGP). Staff of these projects are committed to create synergies but they struggle with practical, institutional problems, such as different criteria for target groups, different procedures or different planning cycles.

¹¹ A case of conflict of interest of the DTO was presented to the team which was seen as a reason for delayed labor payments

The cooperation with the DADOs is still weak, for one due to the notorious lack of resources of the DADOs and for another due to the priorities of LILI-staff for the cooperation with the various actors at district level.

Capacity at Central Level for FMIS-Policy and -Coordination

According to the project document, a Steering Committee (SC) is supervising the project and a Project Support Unit is responsible to "manage and administer the overall program" and among others "provide technical and social guidance to LSPs and LRPs". In July 2010, by a decision of the SC, a Project Coordination Unit was established in DoLIDAR, which is an important step towards building capacity at central level for coordinating the sub-sector. However, it still lacks a clear cut role and responsibility to take over this task.

In the project document no mention is made of support to policy or sub-sector development. The realization that a stronger institutionalization of the LILI approach in the local system is necessary for scaling-up, resulted in the inclusion of the task "... to provide support to the policy development" in the yearly plan of operation 2012-13. LILI in consultation with SDC drafted a first rough concept for a 'sub-sector-approach'.

The concept of a sub-sector approach for FMIS is not yet very prominent and well conceived of by Government agencies including Ministry of Irrigation, which would be ready to hand over its funds for small FMIS to the DDCs for implementation. As mentioned in chapter 2.3.1 (Relevance for Central Level) MoFALD and DoLIDAR expressed their commitment and have undertaken first steps, partly with support from LILI, or based on the experiences of LILI. The project has also provided considerable advice for the development of the ADB-funded Community Irrigation Project (CIP), which at present is the only other donor-funded FMIS-project under DoLIDAR. There are other programs supporting FMIS (e.g. RAP, PAF) as part of larger programs but not as a focused component.

2.4.2 Findings

Implementation Effectiveness

LILI has established an effective approach to increase the agricultural production of marginal farmers through FMIS and by that contribute to the improvement of their livelihood. The approach is contributing to a more equitable distribution of benefits and maintenance arrangements are appropriate to ensure sustainability (see chapter 2.5).

While the project makes considerable efforts in linking farmers with agricultural services there is no clear evidence, whether the provision of agriculture services is sufficient or whether more support would result in even bigger incremental benefits. The question is: What are the relative contributions to the increased production and thus to improved benefits of a) the FMIS intervention (availability of water) and b) the agriculture related inputs. In the review team's opinion this is a crucial question for the further development of the approach, which according to the team's observation got lost in the discussion concerning the most pertinent outcome indicator (indicator 1.3: cropping intensity) for measuring the success and relevance of the LILI.

To understand the effectiveness of the LILI approach, we need to look at the intended impact of improved food security (and increased income) and we need to understand the pathway leading there (i.e. impact hypothesis). Obviously cropping intensity is one

element. Others being increased crop area, crop diversification, increased inputs and labor and capital, and increased crop yields. What we need to know is the contribution of each of these elements towards increased income as basis for steering the type of support needed. In this regard monitoring of a single outcome indicator helps to see whether change occurs, but it does not answer the question of contribution. First of all a plausible impact hypothesis is required which needs to be tested by observing not only cropping intensity but additional indicators such as crop diversification (which is also directly linked to the provision of water) and other factors mentioned above. For these reasons asking for a 50% increase in cropping intensity (CI) only makes sense if we know how much such an increase contributes to the impact, irrespective of whether the target set (50%) is realistic in the given context. Therefore, the emphasis in the outcome monitoring on a single indicator for the purpose of accountability is misleading. It resulted in LILI trying to establish a direct correlation between CI and income which most likely does not exist (given the multiple factors of influence mentioned above) and will not produce the answer we need¹².

Institutional Achievements

In terms of institutionalizing LILI so far succeeded in integrating the approach to a fair extent into the regular implementation procedures of the DDCs. Thereby the main effort of the project has gone into implementation whereas capacity development of partners has come second for the following reasons:

- Assignment of roles and responsibilities between LILI-staff and Government staff at DDC-level is defined in the project document (to provide TA). However, in practice there is a lack of clarity among stakeholders whether the role of LILI is to implement or to provide technical assistance;
- Recognition / acceptance of LILI-support by "DDC-clients";

On the other hand the expansion of the LILI-team with the establishment of district teams of 2 to 3 staff per district and an Institutional Development Coordinator at the PSU should partly compensate for the mentioned constraints.

At the same time institutionalization is being hampered by the uncertainties in the District administration created by the unresolved political situation. Moreover, for a fully harmonized approach in the districts more guidance is needed from the center, at least a clarification regarding the channeling of funds for FMIS from the various ministries. MoFALD / DoLIDAR has a role to play with or without sub-sector approach in providing guidance and technical support to districts. DDCs will have to improve their implementation capacity for FMIS which ranges from systematic planning (District Water Resources Master Plan) to reliable supervision and quality assurance.

The Government partners are not yet well prepared, in terms of institutional set-up and capacity (FMIS-unit in DoLIDAR not yet fully operational) as well as of conceptual clarity, to discuss a sub-sector approach. This is an important difference with the trail bridge sector, which was frequently quoted as a successful example. There SDC/Helvetas was the only substantial donor in a sub-sector where only one Department was concerned with and where the idea was gradually evolving within a fairly close, longstanding

¹² Agriculture Impact Assessment, 7.1.2 Weaknesses, page 60: "...while SDC and its IPs have embraced outcome-based monitoring in the last 4-5 years, impact-level change is not routinely tracked or reported. As such, the answer to the question 'what does it all add up to?' remains unanswered."

partnership between GoN and donor agency. The results of LILI in policy / sub-sector development after just one year of formally launching this support need to be assessed against this background. Accordingly, the contributions to developing guidelines and the efforts to start a discussion on a sub-sector approach are a good start. The concept note produced in the context of the YPO 2011 – 12 on the other hand shows that also on the part of the donor and implementing agency the sub-sector concept needs to become clearer. Here, HELVETAS's experience in the development of the trail bridge sub-sector leading to a SWAp should be useful and capitalized as far as the different conditions allow.

2.5 Sustainability

Is 'LILI' doing the things right?

2.5.1 Observations

Sustainability of Results

According to farmers the benefits resulting from the IS are so substantial that production will be continued and if possible further increased in the future to sustain the gains in food sufficiency and to further increase income for their children's schooling and health services.

The communities visited found no major obstacles to market their agricultural products and therefore are confident to continue and increase production. The services of SSMP provided after completion of the irrigation schemes help to consolidate the farmers' new economic activities.

Sustainability of Schemes

A considerable number of projects are rehabilitations of existing canal systems that had fallen into disrepair. This raises the question, why farmers were not able to maintain the schemes and what would be the guarantee that they would maintain it after rehabilitation by LILI.

Maintenance in a 6-year old scheme



Two maintenance workers on a cleaned canal in Jhilmile Talbari Irrigation Scheme, Surkhet

According to information received from villagers and the project, these were canal schemes where either damage was such that repair exceeded the technical or financial capacity of the community (e.g. extreme topography of channel alignments, intakes on rivers) or problems in the management of the scheme could not be settled (e.g. water not available for tail end users). Adding to a 'vicious circle' reduced availability of water led to low cropping, leading to reduced income, i.e. money for rehabilitation was not sufficient.

The review team found that in all the visited schemes, operation and maintenance are governed by a policy for water distribution and maintenance. Caretakers are employed and paid by the user groups and farmers contribute to the Operations and

Maintenance (O&M) fund regularly. This arrangement is also operational in a scheme that was completed six years ago and has considerable maintenance requirements. The community raised for example NRS 18'000 for major maintenance.

There are some technical issues such as durability of pond lining, proper alignment and lining of channels. The review team understands that the project is aware of these issues and is working on solutions.

2.5.2 Findings

Sustainability of Results

Raising awareness for agricultural production and irrigation scheme related inputs and services as well as establishing such linkages is explicitly foreseen in the design of the project. With regard to facilitating access to markets the project document mentions

Embedding LILI in value chains

"Projects need to ensure that they are not conceived as 'production solutions' from which marketable surplus can be sold as an 'additional benefit' but as initiatives that promote and support informed, market-based production choices and linkages."

(Assessment of Agricultural Initiatives)

support to collection and storing centers and processing of vegetables, but such activities apparently have not been supported so far. As argued under 2.4.4 (discussions about cropping intensity) the crucial question is what type of support and how much support farmers need to make the best use of irrigation. This requires a proper analysis of 'backward and forward linkages' within the value chain of which the farmers are part of. If these linkages provide the adequate support, farmers are even more likely to improve production on a sustainable basis.

At the same time, the project also has to think in terms of sustainability of such services, which leads to the role of DADO, Agriculture Service Centers and Livestock Service Centers. Even if

their capacity is limited or not sufficient to cater to all the needs, they have a role to play in combination with local service providers and therefore need to be considered in the design and implementation of the project.

Sustainability of Schemes

The concept and support of LILI with regard to O&M is good practice. Improvements in the design and in some technical aspects along with adjustments in the post-construction follow-up can further increase sustainability.

In addition, it is important to link the user groups with VDC and DDC for contributions to major maintenance of schemes from the block grants, and/or with District Disaster Funds for maintenance in case of natural disaster.

However, realistically system-inherent problems of O&M will persist (e.g. socio-cultural patterns, GoN support structures) which leaves always a certain risks that O&M will not be sufficient in each and every scheme.

2.6 Efficiency

Is 'LILI' doing the things right?

2.6.1 Observations

Operational Performance in Districts

The fact that the approach is highly accepted at district level can be taken as an indication for a good operational performance. We found project staff of LILI in the districts being very committed, striving for good implementation even under difficult

circumstances. As mentioned under 2.4.4 Institutional Achievements, roles and responsibilities are not always clear to all partners. Nevertheless we saw, within the limitations which are mainly a result of institutional constraints (e.g. capacity, procedures), fairly good coordination and cooperation with Government agencies and other SDC/Helvetas projects. Due to government procedures respectively related institutional inefficiency this does not always mean *efficient* operations.

Linkages to other FMIS activities in the district projects, i.e. DTO small irrigation schemes, DADO, other water resource management projects, were not directly observed. According to reports in some districts cooperation with RAP and PAF did/does exist.

The cooperation with other SDC/Helvetas projects is actively sought but is hampered by differences in the procedures (e.g. different group size and planning cycles) but in principal contributes a lot to the quality of services that the farmers receive.

Operational Performance at Center

As far as LILI project management is concerned we see that the team is committed and performs quite efficiently. The project management is supported by a good, systematic monitoring, and by a useful post construction follow-up and monitoring.

There remains an impression both at district and central level that LILI is focused on its own performance which leaves less room for networking with other projects and organizations in the FMIS subsector.

However, LILI made a substantial input into the conceptualization of the Community Irrigation Project financed by ADB. It supported DoLIDAR in drafting guidelines and manuals for FMIS, but so far could not be very active in promoting the sub-sector concept.

On the Government side the process towards establishing a FMIS-section and developing policies for FMIS is slow and as mentioned elsewhere the vision of a sub-sector approach is still weak.

2.6.2 Findings

Operational Performance in Districts

The cooperation at district level requires a number of clarifications to the extent that LILI's role of Technical Assistance provider rather than implementer becomes clearer. There is a risk that with such a move the performance may drop, but the sustainability of the delivery system is likely to improve.

The cooperation between SDC/Helvetas projects would benefit from an analysis of the factors that contribute to increased productivity and income beyond the infrastructure input of LILI (see also 2.4.4, Implementation Effectiveness). It would help designing an optimal mix of services actually required by the farmers and therefore would be more demand-driven, than supply-driven.

Operational Performance at Center

The slow progress in establishing the institutional set-up for FMIS in DoLIDAR makes it difficult for LILI to contribute to the policy development. Moreover, it is obvious that LILI has to depend on SDC and Helvetas PO for the policy dialogue. There we see a need

for clarifying the respective roles and tasks of LILI, SDC and Helvetas PO in the policy dialogue and development to allow for an efficient cooperation.

2.7 Conclusions / Overall Assessment

Given the impact observed and the fact that agriculture remains the main if not only livelihood option for a large number of people from marginal groups in rural Nepal, the targeted approach of LILI contributes significantly to important development goals both of the Government of Nepal and SDC as the donor. These goals are food security, increased income as a basis for improved livelihood and participation of DAG in the development process.

In addition the approach has a positive impact on what we call 'precarious' migration.

When comparing the approach with alternatives, it shows that it is not a question of either or, but of complementarity, because irrigated agriculture remains the basis even for some of the alternatives. Given the magnitude of the problem, Nepal has to apply multiple approaches.

Even economically the approach appears viable, not in terms of contribution to the GNP, but in terms of a positive return on the investment, which is not given in many similar projects.

Thus we consider LILI a relevant and effective approach which deserves to be developed further. The focus of further development should be on:

- Scaling-up
- Optimizing / maximizing impact

The strategies for achieving this we see as follows:

- Institutionalizing the approach by developing a FMIS-sub-sector which requires focused action by the GoN to coordinate the FMIS sub-sector, combined with coordinated donor support to build capacity at central and district level.
- Broadening the funding of FMIS by integrating all related GoN-funds and attracting new donors to subscribe to the approach.
- Reviewing the needs of farmers in terms of 'backward and forward' linkages within the agriculture value chain required to get the maximum benefit.

3 Recommendations

1) Continuation of Project

Against the background of our conclusions we recommend to continue the project, with specific recommendations for the partners involved.

2) Long-term Commitment of SDC

We recommend, SDC to continue funding of the project, based on a long-term commitment which allows supporting the development of a sub-sector approach for FMIS.

Considering the complexity of the sector and the issue (see also chapter 2.4.4) developing a sub-sector approach will certainly take longer than another 3-year phase.

A condition for a long-term commitment on the part of SDC should be an agreement with the GoN on the development of a sub-sector.

3) Binding Commitment for Sub-sector Approach by GoN: MoFALD / DoLIDAR

We recommend, MoFALD / DoLIDAR to develop the concept of a FMIS sub-sector with high priority, banking on the support of the current donors (SDC and ADB). For the recommended approach see below.

MoFALD should develop a formal agreement on a schedule for the implementation of a sub-sector approach as a basis for donor commitments.

If parties agree on above, the following recommendations focus on the continued implementation of the project.

4) Staged Development / Introduction of a Sub-sector Approach

We recommend taking a realistic approach to the development of a sub-sector which comprises at least the following features:

Covering only interested and active districts in the initial stage

The districts can apply for working under the sub-sector approach. We recommend thinking of in-built incentives for good performance of these districts, to create a certain competition as an encouragement for other districts to join the approach.

Develop a 'decentralized' sub-sector approach. We recommend a decentralized approach which means the role of the center in implementation will be mainly to channel the various IS-funds to the DDCs, coordinate donors at central level and to set standards and establish a quality control system. The DDCs would take full responsibility for planning and implementing the projects, while the 'center' would be responsible for financial and technical audits.

Proposal for Basic Steps and Responsibilities

Steps and Activities	GON	SDC	HELVETAS
1 Prepare FMIS sub-sector Policy and Strategies			
<ul style="list-style-type: none"> Prepare policy and strategies 	Take lead	Support dialogue	Support w/ technical know how
<ul style="list-style-type: none"> Prepare uniform Small/Farmer Managed Irrigation Scheme Guidelines and Operational Manual (follow implementation of LILI FMIS modality through DDC/DTO) 	Take lead	Co-Funding	Support w/ technical know how
2 Strengthen institutional capacity to implement multi-sector programs at national and district level			
<ul style="list-style-type: none"> Form Multi-sector Coordination Forum for the national level coordination of FMIS Sub-sector at the central level. 	Take lead	Participate	Support w/ know how on institutional development
<ul style="list-style-type: none"> Form Multi-sector Coordination Committee at district level 	Take lead		Ditto
<ul style="list-style-type: none"> Establish a Small Irrigation Unit as secretariat of the Forum at DoLIDAR and DTO 	Take lead		Advisory service on request
<ul style="list-style-type: none"> Adopt decentralised fund flow mechanism - through District Development Fund to those Districts committed to prepare and implement FMIS Sub-sector Plan 	Implement		
<ul style="list-style-type: none"> Build capacity of the districts willing to design and implement FMIS Sub-sector Plan 	Establish guidelines /procedures		Provide capacity building
<ul style="list-style-type: none"> Start implementation of FMIS Sub-sector Approach in LILI districts from the next phase 	ditto	Co-Funding	Provide technical and institutional capacity building
3 Scaling up of the approach to more districts			
<ul style="list-style-type: none"> Scale up to other interested and committed districts if there will be demand for FMIS Sub-sector Approach 	Mobilize additional funds for FMIS	Support mobilization of additional donors	Advisory services to districts on request
<ul style="list-style-type: none"> Incorporate indicator in the 'Minimum Conditions / Performance Measures System' to monitor performance of the districts where FMIS will be in operation (and to provide performance based incentive) 	Define standard		Support w/ know how on monitoring / performance measurement

5) Review of Project Strategy

We recommend that SDC and Helvetas review the implementation strategy, namely

- a) A simple but systematic assessment to better understand the requirements of farmers in terms of 'backward and forward linkages' to maximize the benefits from the irrigation. This should lead to a clear concept regarding the type of services and the

mode of delivery that suits the need of farmers best. We do not suggest delivery through a single multi-sectoral program, but an adjustment of the procedures of the contributing projects that allows for optimal coordination of inputs to farmers.

- b) Develop concrete ideas for scaling-up of the project. This requires ...
 - i. a clarification of the geographical focus of scaling-up, i.e. priority to full coverage of cluster districts or expansion to other districts too. The latter would be in line with the recommendations made on the introduction of a sub-sector approach, but may challenge the resources of the project.
 - ii. a clarification of the role of LILI, which should be in technical assistance rather than implementation.
 - iii. a clarification of the modalities for delivering the identified complementary services to the farmers (see a), i.e. whether this will be done through joint efforts of the projects currently involved, or through other arrangements. We recommend finding a modality which leaves a maximum of freedom to the farmers, while making sure that they have access to the necessary information to make 'informed decisions'.
 - iv. a review of the involvement of LSP and LRP with regard to quality assurance.
- c) Develop a systematic plan for the institutional capacity building at district and central level, comprising:
 - i. Compilation of requirements (capacities and competences) at district level under the aspect of scaling up.
 - ii. Clarification of roles and responsibilities of SDC and Helvetas respectively for support to policy sub-sector development.
 - iii. Design of a capacity development plan, defining objectives, responsibilities and resources.

Terms of Reference / Methodology

1. Purpose

The overall objective of the External Review is to assess the relevance and effectiveness of LILI and provide the Government of Nepal (GoN) and Switzerland with critical lessons learnt and recommendations for the future of Swiss engagement in small scale irrigation sub-sector promotion.

2. Objectives

The specific objectives of the ER are:

1. To analyze the effectiveness and efficiency of the project mainly following areas:
 - i. Changes in lives of the beneficiaries, that is attributable to the project interventions,
 - ii. Achievements of the outcome targets especially that of cropping intensity,¹³
 - iii. Sustainability of the effects, relevancy of part to the whole (link between benefits at the household level to villages, district and national level poverty reduction),
 - iv. Value addition of HELVETAS in the implementation of the project in comparison to the costs,
 - v. Efficacy and effectiveness in the application of different approaches – targeting, gender, conflict sensitive programme management, workforce diversity,
 - vi. The achievement of in-situ synergies reached in coordination with other agricultural and livelihood initiatives, particularly those funded by SDC,
 - vii. Missed and seized opportunities to improve the livelihood of beneficiaries beyond LILI's immediate field of intervention,
2. To assess the relevance and leverage of project to support in the promotion and strengthen small irrigation/FMIS sub-sector.
3. To recommend a possible future orientation in the field of small irrigation/FMIS sub-sector in the context of current socio-political scenario for SDC to consider.

3. Key Questions

Objective 1: Project effectiveness and efficiency

- What are the major achievements of the project towards poverty reduction of project beneficiaries that can be attributed to LILI Phase II? Has the project achieved its outcome targets, mainly related to expanding the cropping intensity? What are the lessons learnt?
- What are the major achievements of the project towards achieving the second outcome? Have the capacities of local bodies, local service providers and local resource persons been strengthened to be able to respond to small farmers need for reliable irrigation systems? (not specifically only to LILI supported schemes but overall sub-sector in the districts of its operation).

¹³ Cropping intensity is chosen because this indicator can be attributed closest to the project, than the change in cropping pattern

- How sustainable are the impacts and the schemes themselves? Most of the canal schemes are rehabilitation; how were those being maintained? Why did they need rehabilitation now? Was it because the lack of maintenance? If that is so, what are the maintenance mechanisms exist that ensure that same will not happen again? To what degree are the measures being replicated by members beyond the immediate circle of beneficiaries?
- What are the specific values that HELVETAS adds in implementing the project, in relation with the costs? What would be a trade-off between a national consultant/NGO implementing the project vis. a vis that by HELVETAS?
- Can the Outcome Monitoring Summaries prepared by the project as a part of monitoring and reporting be validated?
- How effective is the application of approaches adopted by the project like targeting to DAG, Gender, CSPM, workforce diversity?

Objective 2: Project relevance and leverage for scaling up

- How effective has the project been to influence the development of the small irrigation/FMIS as a sub sector?
- What are the status, achievements and role of the project been in the following:
 - policy influence at central level (with the support of SDC):
 - i. preparation of a national strategy, action plan, guidelines etc.
 - ii. donor coordination, exchanges among the FMIS projects and stakeholders, joint steering committees etc.
 - harmonized implementation approach in district with a single planning, budgeting, implementation and monitoring system for all the FMIS in the district irrespective of funding agencies, and
 - implementation support in working districts – providing Technical Assistance to all the FMIS in the district irrespective of funding agency.
- What are the project's opportunities and limitations in terms of project's links to other FMIS efforts of the GoN? Other donors?

Objective 3: Recommendation for future orientation keeping in mind the following questions/issues:

- What is the value and opportunity cost of being engaged in FMIS in remote districts in the context when there are out migration of the people from remote districts, with little preference for subsistence farming?
- What is the relevancy at a macro level? What are the links between benefits at the household level and impacts at village, district and national level poverty reduction? Can such intervention make a significant difference?
- If such interventions are still relevant for SDC's involvement what is the future potential to scale up and increase leverage towards development of a harmonized small irrigation/FMIS sub-sector? What is the level of readiness of MoLD, DoLIDAR, DDCs and HELVETAS to do so?

Mission Program

Date	Time	Task
17.09	09:00	Arrival of Markus Engler
	14:00	Meeting Review Team: Markus Engler and Kapil Ghimire
18.09	9:00 – 10:30	Meeting SDC Cooperation Office with Aman Jonchhe (Senior NPO) and Dandi Ram Bishwakarma (NPO)
	12:00 – 12:30	Meeting with Jean Francoise Cuenod, Head of Cooperation, SDC
19.09	8:45 – 9:45	Interaction with HELVETAS Program Office
	10:00 – 14:00	Interaction with LILI HELVETAS
	14:30 – 15:30	Interaction with SSMP HELVETAS
20.09	15:30 – 16:30	Interaction with LILI Project Coordination Unit (PCU) DoLIDAR
	16:30 – 17:30	Interaction with MoFALD
21.09	15:00 – 16:30	Interaction with MoAD
22.09	7:00	Travel Ktm to Manthali, Ramechhap
	14:00	Arrival at Manthali
	14:30 – 15:30	Interaction with SDC/HELVETAS Projects
	15:30 – 17:30	Interaction with LILI district team
	17:30 – 18:30	Departure to Ramechhap Bazaar and overnight stay
23.09	7:00	Breakfast in the Hotel Ramechhap
	7:00 – 7:30	Drive to Ratatar
	7:30 – 8:30	Walking from Ratatar to Bhotetar village
	8:30 – 12:00	Observation of the Bhotetar canal irrigation scheme and interaction with users, lunch in the village
	12:00 -13:30	Return back to Ratatar (walking)
	13:30 – 14:00	Drive back to Ramechhap bazaar
	14:00 – 14:30	Drive to Katunje pond irrigation scheme of Okhreni VDC
	14:30 – 17:30	Observation of the pond irrigation scheme and interaction with users
17:30 – 18:00	Return back to Ramechhap and overnight stay	
24.09	7:00 – 7:30	Breakfast in the Hotel
	7:30 – 8:30	Travel to Manthali
	8:30 – 9:30	Interaction with DDC and political parties at DDC
	9:30 – 10:30	Interaction with DTO
	10:30 – 11:00	Interaction with DADO
	11:00 – 12:00	Interaction with Local Service Providers (LSPs) at DDC
	12:30 –	Lunch and departure for Kathmandu
25.09	8:45 – 10:00	Fly Kathmandu to Nepalgunj
	10:30 – 17:30	Drive Nepalgunj to Dailekh HQ

		Overnight stay in Dailekh HQ
26.09	7:00	Breakfast in the Hotel Dailekh HQ
	7:30 – 10:30	Walk to Alainchaigaira Pond Irrigation Scheme
	10:30 – 13:00	Observation of the pond irrigation scheme and interaction with users community, Lunch in the village
	13:00 – 16:00	Return back to Dailekh bazaar
	17:00 – 18:00	Interaction with HELVETAS in-house projects
		Overnight stay in Dailekh HQ
27.09	7:30 – 8:00	Breakfast in the Hotel
	8:00 – 10:00	Interaction with DDC and political parties at DDC
	10:00 – 10:30	Interaction with DTO
	10:30 – 11:00	Interaction with DADO
	11:00 – 12:00	Interaction with LSPs
	12:00 – 12:30	Lunch
	12:30 – 14:30	Drive to Naulekatuwal
	14:30 – 15:30	Walk to Biurada Padila Canal Irrigation scheme
	15:30 – 16:30	Observation of the schemes and interaction with Users
	16:30 – 18:30	Travel to and Overnight stay in Birendranagar, Surkhet
28.09	7:00 – 10:30	Breakfast in Birendranagar Surkhet Hotel
	10:30 – 11:00	Birendranagar to Chhinchu
	11:00 – 13:00	Observation & Interaction with users of Jhilmile Taalbari Canal Irrigation Scheme Lunch at Chhinchu
	14.00 -	Chhichu to Nepalgunj and fly to Kathmandu
29.09		Compilation of observations and findings
30.09	09:30 – 10:30	Meeting with Jean-Francoise Cuenod, Aman Jonchhe and Dandi Ram Bishwakarma Compilation of observations and findings, Preparation of debriefings
	10:00 – 11:00	Debriefing meeting with Jean-Francoise Cuenod, Aman Jonchhe and Dandi Ram Bishwakarma
01.10	12:00 – 13:30	Presentation of findings to HELVETAS PO and LILI
	15:30 – 16:00	Interaction with CIP DoLIDAR
	02.10	14.00 – 15.00
03.10		Preparation of presentation / draft report
04.10	11:00 – 13:30	Presentation of findings to SDC, MoFALD, DoLIDAR, CIP, HELVETAS/LILI, SSMP, DoI, NPC, MoAD, MoF, NFIWUAN
05.10	11:00 – 11:30	Interaction with Helvetas PO,
	20:00	Preparation of draft report Departure of Markus Engler

Organizations / Persons contacted

Kathmandu

Organization	Name	Position / Designation
Swiss Agency for Development and Cooperation	Jean-Francois Cuenod	Head of Mission
	Aman Jonchhe	Senior National Program Officer
	Dandi Ram Bishwakarma	National Program Officer
HELVETAS	Shiva Aryal	Country Director
	Juerg Merz	International Advisor
	Niraj Acharya	Senior Program Officer
LILI	Bhagat Bista	Team Leader
	Thakur Thapa Magar	Senior Monitoring Officer
	Binod Barai,	Senior Social Development Officer
	Jivan KC	Institutional Development Coordinator
	Susan Shakya	Technical Coordinator
	Madan Kumar Shah	Admin. & Finance Manager
	Robi Groeli	Technical Advisor (international)
SSMP	Bishnu Kumar Bishwakarma	
Department of Irrigation Non Conventional Irrigation Project	Khom Raj Dahal	Director General
	Kishor Kumar Bahttarai	Programme Manager/DDG
Department of Local Infrastructure and Agricultural Roads	Bhupendra Basnet	Director General
	Kumar Thapa	Senior Divisional Engineer
	Shekhar Pd. Dali, DoLIDAR	Engineer
Community Irrigation Project	Prakash Thapa	Senior Divisional Engineer
Ministry of Federal Affairs and Local Development	Dinesh Thapaliya	Joint Secretary
	Ramesh Adhikari	Under Secretary

Dailekh District

Organization	Name	Position / Designation
District Development Committee	Bishwa Prakash Aryal	Local Development Officer
	Samshaer Bahadur Shahi	Program Officer
	Chitra Khanal	VDC Secretary
Representatives of Political Parties	Amar Bahadur Thapa	
	Krishna Kumar BC	
	Krishna Prasad Jaisi	
	Ratna Bahadur Shrestha	
	Rana Bahadur Singh	
	Min Bahadur Shrestha	
	Surat Bahadur Shahi	
	Lila Ram Koirala	
	Yagya Raj Bharati	
	Bhupendra Bahadur Shahi	
	Mahasg Bam	
Barunath Yogi		
Ranga Bahadur Tamang		
District Agriculture Development Office	Suresh Kumar Thapa	District Agriculture Officer
SDC/Helvetas Projects	Shrithi Shrestha, LILI	Technical Officer
	Bibhuti Baniya, LILI	Social Development Officer
	Shilpa Kunwar, LINK	

	Shyam Dev Chaudhary, SSMP Rakshya Sharma, SSMP	
DDC/District Technical Office	Rabindra Kumar Sharma, DTO	Chief (Engineer), DTO
Local Service Providers	Bal Kumar KC Chandra Bahadur Khadga Chhatra Saru Dan Bahadur Sunar Bimala Sharma Meera Swornakar Jagat Hamal	
Farmers - Alainchigaira Irrigation Scheme	29 villagers Magar and Nepali	
Farmers - Biurada Padilla Irrigation Scheme	33 villagers Thapa, Khadga, Nepali	

Ramechhap District

Organization	Name	Position / Designation
SDC/Helvetas Projects	Apsara Karki, RHDP Rasmi Pandit, SSMP Mausam Mainali, LILI Ghanshaym Chamling Rai, LILI Shakti Kumar Lama, RHDP Roshan Mehta, Home Garden Jaya Bdr Bhujel, DRILP	Technical Officer Social Development Officer
Bhotetar Canal Irrigation Scheme of Ramechhap	35 villagers Lama, Biswakarma Tamang, Shrestha	
Katunje Pond Irrigation Scheme	40 villagers Tamang, Ghising Magar, Biswakarma Lama, Karki Shrestha	
District Development Committee	Narayan Pd. Mainali, Omkar Prasad Ghimire,	LDO VDC Secretary
DDC/District Technical Office	Nirmal Darsan Acharya Bijaya Ranamagar	Divisional Engineer Engineer
Representatives of Political Parties	Ram K. Lama Tul Pd. Kadel Prem Bdr Tamang Prakash Karki Kailash Thapa Indra Shrestha Bishnu K. Tolange Hira Bdr Shrestha Ananda Shrestha	
Local Service Providers	Ratna Pd. Kadel Govinda Ghimire Bhola Pathak Roshan Shrestha Chandra Bdr Khati Sumala Rai	

	Manu Gurung	
	Gautam Shrestha	
	Prasamsa Yonjan	
	Kumari Hayu	
	Dhruba Budhathoki	
	Suchana Karki	
	Lila Tamang	
	Ambika Pd. Kafle	
	April Adhikari	
	Ujwal Ghimire	
	Chhabindra Shrestha	
District Agriculture Development Office	Govinda Barakoti	District Agriculture Officer
District Livestock Service Office	Rakesh Prajapati	District Livestock Officer
Jhilmile Talbari Irrigation Scheme, Surkhet	Dambar Dhakal Dhana Bahadur Sunar	

Summary of Observations in Schemes visited

District:	Ramechhap			
Name:	Bhotetar Piped System			
VDC / Ward No.	Ramechhap / 9			
System:	Piped Canal (Rehabilitation)			
Main Canal:	1.8km. (piped)	Command area: 154 Ropani (7.8 Hectare)		
Households:	Total: 34	Dalit:7	Janjati: 21	BCT-N: 1
UC Members	Total: 9	Dalit: 1	Janjati: 7	BCT-N: 1
	Women: 4	Men: 5		

Characteristics	<ul style="list-style-type: none"> Poor community that moves seasonally from Bhesi to higher settlements Had a canal from a good source below water supply source, but due to difficult topography (vertical cliffs) they could not maintain it. For the last 3 years they had no water from this canal Of a CCA of 134 ropani only 34 ropani could be cultivated The pipe will be a durable solution for the problems on the canal
Most significant change Benefits	<ul style="list-style-type: none"> Water helped to increase food sufficiency from 6 to 9 months No longer dependent on outside wage labour Stopped migrating Increased production 4 fold Feel impact but cannot yet express it in figures. Expect to double vegetable production as a cash crop. No savings yet but they are better off. Can sell vegetables to Ramechhap Bazaar Villagers who left the village to other places in th district, came back after scheme was completed. Landprices increased
Outcomes	<ul style="list-style-type: none"> CI is way up from 1 to 3 crops
O & M	<ul style="list-style-type: none"> Farmers are organized in a OP&M committee have a caretaker Agreement, collect fees form all users Need-based Maintenance functions on the basis of self-organization of the group that draws water
Factors for Success	<ol style="list-style-type: none"> A contribution from outside Our contribution Joint / cooperative action
Priorities	<ol style="list-style-type: none"> Extension of irrigation with the remaining 400 meters of pipe which were not included in the design. Bridge across Sunkoshi (span: about 300m) to have access to the markets Support to school

District:	Ramechhap			
Name:	Katunje, Pond System			
VDC / Ward No.	Ramechhap / 9			
System:	Ponds new			
Main Elements:	3 ponds new 5.04 km pipes	Command area: 248 Ropani (12.6 Hectare)		
Households:	Total: 54	Dalit: 3	Janjati: 46	BCT-N: 5
UC Members	Total: 7	Dalit: 1	Janjati: 7	BCT-N: 0
	Women: 3	Men: 4		

Characteristics	<ul style="list-style-type: none"> • Village on high elevation, looks well developed in terms of agriculture / better than Bhotetar • Earlier they had to porter everything, • One farmer even carried water (50 liters) at 2:00 a.m. from a Khola below to establish a nice orchard. • Tamakhosi (NGO/LSP) has helped us a lot to achieve improvements in health, agriculture, road, education (people send now children to boarding schools)
Most significant change	<ul style="list-style-type: none"> • Availability of water for irrigation • Education: can afford to send kids to boarding schools • Less expenditures •
Benefits	<ul style="list-style-type: none"> • Vegetable now available from own fields and off-season: 5 to 8 varieties • Improved healthier diet. • One person who had been in Malaysia, and who is running a model farm now, earned enough money in 6 months from selling cucumbers to buy a motorcycle. • Many people go abroad but come back. (in about 30 % of HH migration) • Are looking for market information beyond Ramechhap
Outcomes	<ul style="list-style-type: none"> • Mainly crop variety increased
O & M	<ul style="list-style-type: none"> • 250 HH contribute to O&M, • Bankdeposit • Question arises regarding handing out of loans from O&M • Currently maintenance critical as money is not sufficient, intend to get GoN funds
Factors for Success	<ul style="list-style-type: none"> • A contribution from outside / Development project • Making use of all connections • Own contribution • Collective action / learning
Priorities	<ul style="list-style-type: none"> • Irrigation → vegetable diet • Road, access to markets with bigger loads • Improvement of own resources

District:	Dailekh			
Name:	Alainchigaira, Pond System			
VDC / Ward No.	Kharigaira / 9			
System:	Ponds new			
Main Elements:	3 ponds new 1.4 km pipes	Command area: 92 Ropani (4.7 Hectare)		
Households:	Total: 29	Dalit: 6	Janjati: 23	BCT-N: 0
UC Members	Total: 9	Dalit: 7	Janjati: 2	BCT-N: 0
	Women: 4	Men: 5		

Characteristics	<ul style="list-style-type: none"> • Village relatively remote, • Scattered settlement • No road access • No health post
Most significant change	<ul style="list-style-type: none"> • Earlier many villager migrated to India • Now most people stay here to attend their fields • This allows to send kids to school • Own vegetable → healthier diet, people
Benefits	<ul style="list-style-type: none"> • Earlier had to buy vegetable, now have their own and can sell some on the market • Earlier they had to fetch water in the river, now they have irrigation and drinking water • Intercropping introduced • Received training from DADO
Outcomes	<ul style="list-style-type: none"> • Food sufficiency increased from 3 to 6 months • Cropping intensity: from 2 to 4 "Kethi" i.e. 100%
O & M	<ul style="list-style-type: none"> • Contribution to O&M fund fixed amount per ropani • Initiative for maintenance is with O&M worker • They made use of O&M fund but so far did not ask VDC for support
Factors for Success	<ul style="list-style-type: none"> • N.a.
Priorities	<ul style="list-style-type: none"> • Road, access to markets • Health Post • School: more rooms and better furniture

District:	Dailekh			
Name:	Biurada Padilla Irrigation Scheme			
VDC / Ward No.	Naulekatuwal / 6			
System:	Canal Rehabilitation			
Main Elements:	2 km canal/pipes	Command area: 274 Ropani (14 Hectare)		
Households:	Total: 89	Dalit: 6	Janjati: 23	BCT-N:73
UC Members	Total: 12	Dalit: 1	Janjati: 0	BCT-N: 12
	Women: 5	Men: 7		

Characteristics	<ul style="list-style-type: none"> • Village stretching over a whole hills side → big distance between village and irrigated fields near the river • Scattered settlement • Road access
Most significant change	<ul style="list-style-type: none"> • Earlier they planted rice only. Now they also plant vegetables, however due to distance house – field, this option is less used. • Earlier all went to India for work. Now they see no purpose in migrating because they have "good and healthy food" here
Benefits	<ul style="list-style-type: none"> • The benefit are big • Earlier had to buy vegetable, now have their own and can sell some on the market
Outcomes	<ul style="list-style-type: none"> • Food sufficiency increased from 6 to 9 months
O & M	<ul style="list-style-type: none"> • Contribution to O&M fund fixed amount per ropani
Factors for Success	<ul style="list-style-type: none"> • N.a.
Priorities	<ul style="list-style-type: none"> • Water, water, water • Fertilizer •