9 MilkIT innovation platform

Changing women’s lives – one cow and one litre of milk at a time – deep in the foothills of India’s Himalayan mountains

Thanammal Ravichandran, Nils Teufel and Alan Duncan

We are in need of such platforms to find the target communities to get the impact very fast
(T.K. Hazarika, General Manager, Uttarakhand, National Bank for Agricultural and Rural Development NABARD)

Introduction

In 2012, Tulsi Devi, a 39-year-old widow from the Baseri village in the Himalayan hills of Uttarakhand, India was left struggling to make ends meet. Her husband had died a few years back after a prolonged battle with alcohol addiction. She found herself with just one indigenous cow and a buffalo and a small piece of land barely large enough to produce sufficient rice and wheat to feed her family. The distance from her village to the nearest mountain road leading to the local market made it impossible to sell her surplus milk. She struggled even to pay school fees for her children. Seeing no other option, she sent her eldest son, Sunder, who was only 15, to Delhi to work in a factory.

Tulsi Devi’s life became easier when she joined the MilkIT innovation platform (IP) meeting in January 2013 that created an opportunity to interact with stakeholders to find new ways for selling milk. The regular income flowing in her home gave her the confidence to send her remaining children to school.

The IPs formed in the beginning of 2013 by ILRI helped to address the issues of 1,244 families similar to those faced by Tulsi Devi. The efforts made by the platform set in motion a series of events that led to stronger milk sales, rapid adoption of feed improvement practices and increased milk production. A review of the IPs at the end of 2014 showed that the platforms have facilitated increased incomes for more than 600 households, improved collaboration among the local development institutions, provided employment for many women and that the platforms have changed the mindset of various development policy makers. Mr Ahmed Iqbal, the Chief Development Officer of Almora district has said:
MilkIT platform caught me at the right moment. It seemed to be a catalyst to do something; it also showed that small interventions really can make a difference. So we could really scale this up. I found something that really needs a trigger to have wider results.

**Women in remote hill villages struggle to develop dairy as source of income**

The State of Uttarakhand is characterized by subsistence-oriented mixed agriculture with dairy farming. However, opportunities for generating income are limited, resulting in considerable out-migration to nearby cities especially among men. Women play an important role in dairy farming, but most milk is consumed within households themselves or given to relatives free of cost. Women walk long distances every day among the steep forest hills to collect fodder for their cows and buffaloes. Despite their efforts, these women are not receiving any cash income from their dairy animals. However, improved infrastructure, in particular road connectivity, has in recent years created opportunities for these farmers to link to larger markets and has thus increased the potential to generate income from dairy farming. Nevertheless, farmers still face high transaction costs due to low milk production and the considerable distance of some villages to paved roads. Improved feed and breeding technologies promoted by various institutions have not been widely adopted, as they have generally not been tailored to women’s requirements and have not considered market linkages.

**Grounding the IPs**

**Pull villages together for collective action**

Although villages and settlements are typical units for identifying development activity areas, we decided that IPs would require larger units to trigger collective actions, a decision that was supported by our experience in the district of Bageshwar. Focusing on larger geographical units attracts non-producer stakeholders such as the private sector, especially where dairy value-chain development is concerned. Therefore, village clusters were formed to serve as activity units for IPs. The project was implemented in two districts, Almora and Bageshwar. In each district, two IPs for feed innovations, covering 4–6 villages each, were combined into one market IP for strengthening the market linkages (Figure 9.1). The IPs covered 1,244 families in 21 villages (Table 9.1).

**Seeking members for the IP: intervention history exercise**

While setting up the IP, finding the right institutional members is important. Detailed interviews with key personnel of government and private development
organisations and NGOs focusing on the intervention history of the last decade provided the necessary insights to select appropriate institutional members for the IPs. The selected development actors included the state dairy cooperative (Aanchal, representatives of district and block level), staff of the IFAD-supported development programme, financial institutions (commercial banks, development bank), BAIF (national NGO for breed improvement), development NGOs, district animal husbandry department and extension services (Krishi Vikas Kendra (KVK)). We had expected the agriculture and forest departments

Figure 9.1 MilkIT project IP clusters in Almora and Bageshwar districts, Uttarakhand State, India
Source: Subedi et al. (2014)

Table 9.1 Feed and market IP cluster composition

<table>
<thead>
<tr>
<th>District</th>
<th>Name of market IP</th>
<th>Name of feed IP</th>
<th>Number of villages</th>
<th>Number of families</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bageshwar</td>
<td>Bageshwar</td>
<td>Saing</td>
<td>4</td>
<td>379</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Joshigaon</td>
<td>6</td>
<td>243</td>
</tr>
<tr>
<td>Almora</td>
<td>Sult</td>
<td>Saknara</td>
<td>6</td>
<td>379</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Barkinda</td>
<td>5</td>
<td>243</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>21</td>
<td>1,244</td>
</tr>
</tbody>
</table>

Source: Own research
to be keenly involved, but we found that they were not able to participate regularly in IP meetings. When asked later, they explained that the development of the dairy sector was not among their key priorities.

**How can the IP reach more farmers?**

There are various options in the formalisation and modes of communication while organising IP meetings (Nederlof et al., 2011). Within MilkIT, the aim was to reach large numbers of farmers and stakeholders through the IP approach. Three types of meetings were organized.

First, core IP meetings were organized for each IP on feed and market issues in which representatives of producers and non-producers participated, despite the difficulties of including all stakeholders (Steins and Edwards, 1999).

Second therefore, there was demand for follow-up meetings at village or cluster level to address the issues including the following:

- Only a few representative farmers were able to participate in the IP meetings and there was need for dissemination of discussion/information at village level to allow many farmers to take collective decisions.
- Actions that had been agreed in IP meetings required follow-up at village/settlement level and with individual institutions.
- Some issues differed between villages and therefore needed further discussion at village level.
- Village level meetings provided more opportunity for farmers to express their views which were then taken back to core IP meetings.

The third type of meetings consisted of exchange visits and participatory training sessions that helped with building the capacity of farmers in applying improved technologies and practices and in many cases initiated the adoption of proposed innovations.

**Table 9.2 Summary of MilkIT IP meetings (December 2012–July 2014)**

<table>
<thead>
<tr>
<th>Type of IP meeting</th>
<th>Sult (no. of meetings)</th>
<th>Bageshwar (no. of meetings)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market (IP core)</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Feed (IP core)</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Follow up in villages (market and feed)</td>
<td>53</td>
<td>149</td>
</tr>
<tr>
<td>Training/exchange</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Individual institutional</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>62</td>
<td>162</td>
</tr>
</tbody>
</table>

Source: Own research
All the meeting discussions and follow-up actions were recorded and stored on a shared platform (Google Drive). A summary of meeting numbers over the 20-month project period is given in Table 9.2.

**Constraints, achievements and overcoming the challenges**

Identification and prioritisation of the common issues or constraints for the selected development topic (e.g. dairy development) is an important first step to enable the effective functioning of any IP (Nederlof et al., 2011), and generally requires effective facilitation. This project followed several participatory approaches to prioritise major issues. Before IP formation, focus group discussions with producers and non-producers using the FEAST tool (feed assessment tool developed by ILRI) and semi-structured interviews with key stakeholders helped to understand the issues from the producer perspective. These issues were discussed again in the initial IP meetings using participatory discussion methods to prioritise the key issues. It was an interesting experience to see different innovations emerging from these discussions to address similar issues depending on local context.

**Constraint 1: Small villages, long distance, where to sell little milk?**

Since distances to the next road were long and only a few dairy animals were kept, each producing low milk yields, the transaction costs for milk marketing were prohibitive. The only option to sell milk for these farmers was through the state dairy cooperative ‘Aanchal’ which was subsidising transport by paying for people to transport the milk from the village to the paved road on foot. However, the cooperative’s reach to remote villages was limited, covering only a few villages. No efforts were taken to expand this arrangement to other villages interested in selling their milk. Several dairy collection centres had been started by the state cooperative but were closed after a few years. No effort was made to identify the reasons for the failure of dairy collection centres in these villages. A small study initiated by ILRI in 2013 found that farmers had stopped selling milk to these institutions for a range of reasons including, among others, uncompetitive milk prices, inappropriate targeting of beneficiaries (credit support), rigid rules requiring a minimum of 30 members from each village, and governance issues in measuring quality of milk.

**Solution 1: ‘Let us come together to sell milk and strengthen the system’**

The first intervention adopted by the participants after the initial IP meetings was to improve market links. In Bageshwar, farmers requested an improved price and monitoring system from the state dairy cooperative, Aanchal, as they felt the price they were receiving for their milk was too low. Aanchal failed to address this issue by the time of the next meeting, which led the farmers to set
up Jeganath dairy cooperative, an independent self-help group cooperative covering 8–10 villages. As many farmers in these villages had already been organized into self-help groups, it was easy to bring them together for this initiative. Initially, only 32 farmers participated in the Jeganath dairy cooperative in April 2013, but this soon increased to reach more than 100 farmers in six months. The farmers established a shop in Bageshwar, the nearby town, and contracted a private vehicle for collecting milk from villages. In each village, individuals, such as Geeta Bisht in Kolseer village (Figure 9.2), were elected as group secretaries to collect milk, receiving INR 2/litre as their incentive. The IP members fixed an appropriate milk price based on milk quality.

On the other hand, farmers from Sult preferred to improve their links with Aanchal, the state cooperative, as the distance from their settlements to any town is far. Four new collection centres were formed in this block collecting milk from eight villages. Before the IP, Aanchal had insisted on a minimum of 30 signed-up households in each settlement for establishing one collection centre. However, many settlements in this area consist of less than 20 households. This issue was discussed in IP meetings and Aanchal directly and as a result, Aanchal relaxed this rule and is now allowing 2–3 settlements to form one village cooperative together.

Figure 9.2 Geeta Bisht is now employed in Kolseer village, Bageshwar, to collect milk
Photo: ILRI/T. Ravichandran
Solution 2: We can help to increase production-motivated actors

Identifying effective solutions and implementing agreed actions depends to a large extent on the motivation of the involved actors. Generally, each actor will have their own specific motivation to participate in IPs. It is a major task of IP facilitation to elicit and match these motivations. In this case of MilkIT this was most obvious in regard to credit issues. Once the improved marketing arrangements for milk had been established, many farmers, especially men supported by their women, expressed their interest in purchasing high-yielding dairy animals. However, due to the multitude of formal requirements they could not receive any credit from their regular banks. The IP members from the finance sector, private banks and NABARD, the national bank for agriculture and rural development, came forward to address this issue as they could see a good opportunity to employ development-oriented credit facilities. A private bank appointed one coordinator at block level to reduce formalities. Furthermore, the option of group liability rather than asset liability was introduced, a considerable help for farmers with very little land or other assets. NABARD has subsidized the interest on loans to farmers who have been servicing their loans regularly for 12 months.

Solution 3: Overcoming power dynamics and taboos – how the MilkIT IP succeeded

Handling distorted power dynamics was a considerable challenge for the facilitator in the initial stages of the project. Where these dynamics are not addressed, they can seriously obstruct innovation processes (Cullen et al., 2013). Farmers, especially women, were reluctant to express their views when IP meetings were conducted at government venues. The dominance of higher officials from various government departments led to ‘preaching to farmers’ rather than listening to their needs. Temples or community halls, which were subsequently chosen as meeting venues, offered women and small farmers a ‘safe space’ to voice their opinions. Farmers were then also able to invite development stakeholders to their nearby villages or houses to demonstrate actual practices. This allowed non-producer stakeholders especially from government bodies to gain a better understanding of the issues discussed and actions agreed, compared to merely attending meetings (Blackmore et al., 2007).

Improving links to markets was the first and most important action taken by farmers, yet in a few villages farmers were very reluctant to sell any milk at all due to social and religious taboos. Some of them reported that ‘selling milk is sin’ or ‘if I sell milk, others don’t respect me’. We found these views such serious barriers for emerging innovation that our facilitators decided to stay in these villages for a few days. Their efforts paid off through identifying ‘change agents’. For instance, when the facilitators reached out to and convinced Bhandari, a respected teacher in Besarbagarh village, he in turn persuaded many women to sell their milk. Now that the village receives an additional income
of around USD700 per month, the teacher says the changes in their village towards a better life have become visible to all.

**Solution 4: How to attract the private sector?**

Stakeholder participation or membership is not fixed in the IP. At any given time new members can join the IP meetings depending on the needs identified as well as the opportunities and incentives created by the platform. Both dairy market platforms were finding it difficult to get private milk traders to participate in meetings and extend their milk collection. The trader’s opinion was that ‘these villages comprising 20 to 100 animals will not give us any profit because of the small volume of milk. We will be interested if there is more milk.’ Since the support by finance institutions for purchasing cross-bred cows resulted in increased production, a private trader is collecting milk from Saing village in Bageshwar district where more than 100 litres are produced daily. These farmers are selling their milk partly to the Jeganath cooperative and partly to a private trader. These farmers’ groups have also negotiated with a private feed company to receive concentrated feed at wholesale prices.

**Challenge 2: How to manage the fodder scarcity?**

Animal feeding in the Himalayan hills is dependent on grass collected from the forest area, which contributes about 70 per cent to livestock feed, with crop residues and tree leaves making up the remainder. Fodder collection and feeding are predominantly women’s work in this area. Women collect fodder from forests, remote unused lands and the bunds of cultivated land. On average, this takes 3–4 hours per day. At the end of the rainy season women cut the forest grass for hay-making and store this for the lean periods in winter and summer. Despite all the efforts involved in fodder collection, a lot of fodder goes to waste due to feeding on the ground. Women estimated that 20–25 per cent of the fodder is wasted because it is stamped on by animals or gets mixed with urine and dung. When this was discussed in the IP meeting, it was found that a lack of knowledge on alternative feeding practices and a lack of financial resources were the main hurdles to improving this situation.

The second issue was the seasonal shortage of green fodder. The greater variability of rainfall during the last few years has resulted in increased scarcity of green fodder during winter and summer periods.

**Solution 1: Participatory action research – how to reduce wastage**

As a starting point we interviewed a few key farmers and development actors to better understand previous interventions. It was painful to see manually operated wheeled choppers distributed by several institutions rusting away unused. Shanti Devi from Garikhet village said that ‘It needs two persons to
operate, I am the only one at home, and how can I operate this?’ Based on discussions at an IP meeting, a low-cost, simple wooden handle knife and mechanical sickle choppers (Figure 9.3) were identified as appropriate and attractive implements for chopping fodder. A local manufacturer agreed to produce these choppers at a reasonable price. Finally, a cost-effective and simple feeding trough was designed according to the size of local animals with the help of partner staff.

Imposed technologies can hamper joint learning, whereas learning is a prerequisite for successful innovation (Kristjanson et al., 2009). Initially, farmers were not convinced that the fodder savings through the feeding trough and choppers would outweigh the additional costs. However, participatory trials showed that the use of these improved technologies roughly halved fodder wastage and thereby provided 11 per cent more feed. The immediate benefit of saving fodder was reducing the burden to women; 90 per cent of farmers participating in these trials were women. They reported that these technologies reduced the time required not only for fodder collection from forests, but also for cleaning the waste around the animals. These results were shared in the feed IP meetings that initiated the adoption of these technologies on a wider scale by many farmers. Participating stakeholders including IFAD and NABARD helped with a subsidy (50 per cent) for constructing the feeding troughs and for purchasing the choppers. This helped with the uptake of these innovations. More than 130 farmers constructed feed troughs and more than 225 farmers adopted the women-friendly choppers in one year.

Figure 9.3 Shanti Devi, Garikhet village with a women-friendly chopper (simple knife and frame)
Photo: ILRI/T. Ravichandran
Solution 2: Increase fodder production – dual purpose cereal crops, improved forages

To increase the availability of green forages during the lean periods of winter and summer, technical partners including the local extension service (KVK) and ILRI suggested in the IP meeting the introduction of dual purpose crops (food and feed), temperate grasses and improved forages such as Napier and clover. Demonstration plots for dual purpose crops such as wheat, barley (allowing an early cut during the vegetative stage without affecting grain yields) and maize (providing large amounts of nutritious stover) led to a wide adoption by farmers on small land parcels. Napier grass is promoted by many organisations but its adoption is limited to areas with considerable rainfall or other water resources.

Challenge not addressed: where to get seeds?

The main problem in introducing improved grasses was the sourcing of seeds that were not available from the participating stakeholder institutions. In addition, identifying appropriate grass species was challenging due to extreme weather conditions, including cold winters, dry and hot summers and tropical rainy seasons. There is very limited institutional support for grassland improvement by state institutions. Establishing village-level seed multiplication systems was beyond the scope of the platforms during the short project period. Although farmers were happy with the additional fodder produced with dual-purpose cereals (wheat, oat and barley) the price of seed supplied by the KVK (50 per cent higher than regular cereal seed) may limit the sustainability of this intervention.

Efforts and actions of IP led to impacts

Increased income and employment

‘Small initiatives can make a big difference’: The Jeganath dairy cooperative created by the Bageshwar IP has had a strong impact on the livelihoods of many individuals. Along with Geeta Bisht (pictured in Figure 9.2), seven other people including four women are employed in milk collection, transport and retail. However, the greater effect of the cooperative is probably the opportunity for over one hundred farmers to earn INR 600 to 6000/month through milk sales. Most of this income is handled by women who use it to pay for household expenses, school fees and the purchase of feeds. In Sult region, more than 100 women like Tulsi Devi and their households are benefiting from the dairy collection centres established by the state cooperative. Devki Devi from Besarbagarh village said that ‘Now I earn more than 1500 rupees per month through transport of milk from my village to the road. This income is helping me to get nutritious food for my kids and builds my confidence’.

A preliminary impact study conducted in November 2014 has provided evidence that families participating in IP meetings have five times more savings...
through milk sales than non-participating households. Over a 12-month period, farmers participating in IP meetings have fed their animals with improved forage for 50 days whereas non-participating households have only had forage for 12 days.

**Increased communication**

Improving communication is a core aspect of IPs in general and was one of the major components of the MilkIT project. In reviewing the project’s success in this regard several aspects stand out.

When initiating the IPs it was apparent that smallholder producers already had a strong tradition of group formation and within-village communication, including a strong voice for women. This greatly helped with identifying producer representatives and with the feedback of IP meeting results back into villages. However, these groups, especially the women among them, regularly reported that never before had they had the opportunity to communicate with representatives from other villages and with higher-level representatives of stakeholder institutions.

Stakeholder institutions also valued the opportunity to engage with larger groups of development-oriented smallholder producers through structured dialogue. They appeared to view IP meetings as an efficient access route to their target populations. They also appreciated the communication products generated by the project and integrated them into their activities. On the other hand, it was not clear how far stakeholder institutions valued the opportunity of increased communication among themselves. Greater coordination among development actors leading to greater efficiency and impact does not seem to feature strongly in stakeholder assessments of the IP approach. Rather, queries were raised even within the project whether IP meetings should only be seen as an initial stimulus for increased bilateral communication between producers, development organisations and market institutions, questioning the sustainability of the IP approach.

However, the greatest challenge in improving communication appeared at state level. It was a stated aim of the project to integrate the project into the larger development framework and this was attempted through the establishment of an advisory council. While the six-monthly meetings provided regular updates on the project’s progress to state-level representatives this did not appear to lead to greater interaction of the participating institutions with the project. Most improvements in interaction seemed to be at district level. Perhaps district-level changes have to become apparent first, before state-level representatives begin to take serious interest.

**Factors contributing to impact**

In reviewing the changes stimulated by this project and the contributing factors, three levels of contribution appear to be important.
First, the basic interest of smallholder producers in generating income through dairy production was a fundamental requirement for any change to happen. Although this aspect was not considered during the selection of clusters, fortunately three out of four selected clusters were eager to increase their milk sales. One cluster realized, after some involvement, that the social issues involved with increased milk sales would not justify potential income benefits. During the selection of a replacement cluster, emphasis was placed on current income sources and interest in income development through dairy production. Clusters that already received most of their income from non-agricultural sources, where labour was very scarce and dairy production was not seen as a promising development pathway, were not considered.

Box 9.1 Meet Mahesh Tiwari who doubled his income through Jeganath dairy cooperative

Mahesh Tiwari is 23 years old and from Bolna Naghar village, Bageshwar district. For two years he was working in a Delhi factory after leaving school. Although his village was not selected for this project he started participating in the Bageshwar IP meetings. He soon joined the Jeganath cooperative formed after the initial meetings. The new business opportunities led him to reconsider his plan to work in Delhi to support his family. Instead, he applied for a loan from Aanchal to purchase cross-bred cows. This was refused but NABARD, the national development bank, agreed to provide a loan with subsidized interest. He purchased two cross-bred cows and built a cattle shed with technical support from the KVK, the national extension organisation. Currently, he has increased his herd through purchasing two more cows with savings from his milk sales over the past 14 months. He is currently earning INR 12,000–15,000 per month (USD200–220), twice his factory wages. He can be seen as an informal innovation champion (Klerkx et al., 2010), stimulating other farmers to engage in the dairy business as a livelihood option after seeing his success.
Second, a supportive institutional landscape was essential to achieve wider impact. Over the course of the project, the assessment of which institutions would be interested and able to take up technologies and approaches identified by the IPs and contribute complementary interventions and resources evolved considerably. Some institutions that would have seemed natural scale-up partners did not seem to be willing to leave their established procedures, while others that were not specifically targeted developed considerable initiative. This was especially true for financial institutions that appear to have a role in stimulating change at least as significant as governmental and non-governmental development organisations. On the other hand, the general awareness by the state government of the potential of dairy development provided the necessary support to Aanchal to reassess its approaches to developing milk collection in remote areas.

Finally, the introduction of complementary technologies, both inputs and services, by active stakeholder institutions amplified the changes directly initiated by the project. Most obviously, this applies to the introduction of cross-bred cows, either through purchase or artificial insemination (AI), which enables a huge step in productivity.

What will be the future: forward linkages?

Within the project, the IP approach, an efficient process to identify and implement development interventions, is seen as the more important aspect compared to individual technologies or institutional arrangements. Various activities were undertaken to create a greater awareness among stakeholders of the procedures followed and the outcomes experienced. These included a sensitisation workshop during which an original drama on IP implementation was presented and a policy dialogue meeting at the state level.

This convinced the Chief Development Officer of Almora district to initiate monthly stakeholder meetings at the district level to address dairy development

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**Box 9.2 Conversations heard when a group of women evaluated MilkIT interventions**

‘I have no time to attend meetings’ . . .

‘Ho, it’s painful to collect fodder and most of my fodder is wasted by this animal’ . . .

‘Let’s try simple choppers’ . . .

‘I can sell milk now; I am employed to carry milk to the road’ . . .

‘Now people hear our voice’ . . .
MilkIT DAIRY AND FEEDS INNOVATION PLATFORM (INDIA)
issues. It will be of great interest to follow the evolution of these meetings, especially in regard to participation, issues covered and procedures followed.

This project promoted many technologies and institutional changes including the following:

- The animal husbandry (AH) department has adjusted its policy formulation to include support for construction of fodder troughs, grassland improvement and improved buffalo breeding.
- Various organisations such as the AH department and IFAD loan projects have expressed their interest in promoting the adapted fodder chopper and feed troughs.
- The potential of dual purpose crops has been widely acknowledged by stakeholder NGOs and the AH department.
- The adaptation of village cooperative regulations to the local situation is being considered for wider application by Aanchal, as is the improved targeting of potential supplier communities and the realisation that improved monitoring and transparency of payment systems is required to regain the trust of smallholder producers.

**Conclusions and way forward**

The development of market aspects of dairy value-chains and the improvement of dairy feeding through IPs appears to be an effective and efficient approach to quickly stimulate impressive changes. It was important learning that the actual changes differed considerably between the various platforms, both in regard to value-chain development and feeding, highlighting the importance of leaving the prioritisation of interventions to the platforms themselves. On the other hand, supporting interventions through consistent documentation helped with their wider acceptance. Institutional changes in milk marketing appeared to be a major incentive for farmers to invest in feed and breed improvement despite increased input costs. It was obvious that especially in regard to feeding, simple interventions resulting in near-immediate benefits (such as fodder troughs and concentrate feeding) were more attractive initially than more complex packages with longer time horizons such as grassland development. However, the longer term effects of the IPs are probably more, due to better communication and collaboration of the various stakeholders. Enabling farmers to have their voice heard will allow for more efficient development efforts. Finally, IP partners who have identified various aspects of the project as valuable for their own activities are changing their approaches and are investing their own resources into wider dissemination. This has created an out-scaling potential that had not been envisioned at the project’s outset. It would be very interesting to continue with the observation of how the established IPs evolve and how project outputs and experiences spread through institutions and into new geographical areas. Discussions are ongoing with various partners on how this could be achieved.
Acknowledgements

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References


