

Launching Event of the Smallholder Irrigation Market Network

compiled by Elisabeth Katz, LBL, based on contributions by the participants of the event

In the BN 2/2001 two articles on micro-irrigation for small farmers were published, one of them reporting on the idea of a network for micro-irrigation. These ideas have evolved further over the past year and the following article presents an account of the most recent outcome of this evolution process: the launching event of the Smallholder Irrigation Market Network – a global network to support the widespread dissemination of irrigation technologies that are appropriate for smallholders through a market creation approach.

Context - the network establishment process

A couple of years ago the idea of a global network for smallholder irrigation arose among representatives of IDE (International Development Enterprises) and SDC. This network would support the spread of small-scale irrigation technologies to the many smallholders for whom it would offer an opportunity for better livelihoods. Thus, in May 2001 around 20 persons from different organisations met to develop ideas on how such a network could be designed. The outcome of the meeting was a mandate to a group of people to draw up a network concept.

On another line of action, IDE and Winrock International elaborated SIMI (Smallholder Irrigation Market Initiative), an initiative to capitalise on the experiences gained with smallholder irrigation technologies as well as with market creation and supply chain development, and to scale up the technology and dissemination approach, in order to reach the many more smallholders to whom these technologies offer potential. The core of SIMI consists of business plans (in the European terminology “programme plans”) for scaling-up processes in 5 major regions. The preparation of the first part of these business plans was completed in spring 2002, and financed jointly by the World Bank, the Japanese, Canadian and Netherlands’ Governments; SDC is funding the elaboration

of two more business plans in the Horn of Africa and in Central America, and one study on credit delivery systems for SIMI.

By spring 2002 the concept for the network had developed sufficiently to share it with a wider audience. The concept now integrates the network plans with the five regional SIMI business plans under the common conceptual umbrella of the Smallholder Irrigation Market Initiative (SIMI). Thus an event to launch the SIMI Net was arranged in summer 2002.

The event – objectives and elements

The launching event of the Smallholder Irrigation Market Network took place from July 1-3, 2002, at Rütthubelbad near Bern, Switzerland. Around 40 persons from 13 countries on 5 continents – practitioners from diverse organisations and donor representatives – participated. The event had two main objectives:

- a) to exchange practical experience with smallholder irrigation and with market creation and supply chain development, and
- b) to introduce the plans for the network to a wider audience and muster further support for the network and interest in the opportunities that it offers.

Thus three main elements were on the agenda:

- Field demonstrations of micro-irrigation equipment from various producers and places,
- sharing of practical experiences around smallholder irrigation technologies and market creation through plenary presentations and poster displays,
- presentation and discussions of concepts and plans for the network, and exploring how people can benefit from and contribute to such a network.

Focus on technologies – field demonstrations of micro-irrigation equipment

Field demonstrations with micro-irrigation equipment from various sources were arranged as a start of the event. The selection of technologies to be demon-

strated was determined by the availability of people and organisations. There are other technologies and producers that have as much potential and merits as those demonstrated at this event.

Low-cost drip irrigation kits produced in India. The kits are available in various sizes for use with larger and smaller water containers like drums or buckets. This type of drip irrigation equipment is fairly widespread in use in India and has more recently been introduced in Bangladesh for dry season irrigation.

The horticulture income kit. The kit contains everything that a new user of drip irrigation needs for a start, including drip hoses, tap, joints, filter etc. The packing of the kit serves at the same time as water container. Included are also simple pictorial user instructions, as well as a selection of vegetable seed and advice on how to grow them. The kits are produced in Nepal and will be marketed through local agroveter stores and other available outlets. These complete kits are an answer to the demand by clients to have easy access to a complete technology package – at least to facilitate the entry to this innovation.

Low-pressure sprinkler. This new type of sprinkler is a first prize winner in a contest for “Innovative Irrigation Ideas and Technologies for Smallholders”. This sprinkler has, compared to conventional sprinklers, the advantage that it requires a much lower operating pressure head than other sprinklers to produce good results, and is easy transportable because of its flexible pipes. The system can be easily adapted to different field sizes.

Flat hose drip irrigation kits. They are produced in the USA. The technology originally was designed for use by sophisticated farmers in industrialised countries, but then adapted for small scale use with low pressure. They are available in different sizes. A possible disadvantage for their widespread use by smallholders in developing countries is that their production requires high-tech facilities. In many cases it may however be economically feasible to import the kits from the US for smallholder markets. Many thousands of these kits have been given to poor people in developing countries and are in continuous use there. A major point in favour of this technology seems to be the long life span of the equipment.

On display boards other technologies were presented in pictures or as small models. Among them were the rope pump from Central America, the Jibon pump from Bangladesh, low-cost water storage bags and

tanks, low-cost well drilling technologies, spray irrigation from West Africa, and small low-cost diesel pumps.

The practitioners view – accounts from on-going initiatives

This section provides major insights from display boards and plenary presentations offered by practitioners from diverse organisations and initiatives. There were around ten presentations and 12 displays. The presentations and displays covered a broad range of issues, providing a wealth of useful information. Among them were

- collaborative approaches to adapt and integrate useful and affordable new technologies into the production systems of smallholders,
- strategies and approaches to build sustainable supply chains,
- potential and limitations of market-driven dissemination strategies,
- research into cropping options that allow seizing of the opportunities offered by smallholder irrigation technologies,
- impact of smallholder irrigation and the resulting shift towards commercial crops on peoples' livelihoods.

Although the contributions were so many and so varied, it is attempted here to draw a couple of conceptual learnings from the contributions and the ensuing discussions:

Potential of smallholder irrigation. Smallholder irrigation has without doubt the potential to improve the livelihoods of many people. Low-cost micro-irrigation and other small-scale irrigation technologies have been adopted by diverse types of people, from very poor women to medium commercial producers, and they have led to improved food security, additional income and self-confidence, particularly of women, in many places. However, to realise the full potential, strong efforts of a variety of players are necessary, and a number of issues need attention. The aim of initiatives around smallholder irrigation is not to spread technologies, but to foster asset and income generating opportunities for smallholders.

Micro-irrigation to alleviate water stress. In the many areas of the world where water stress is common, micro-irrigation allows efficient use of scarce water resources. In water scarce areas people adopt

micro-irrigation rather easily, provided that the water scarcity is really felt as a constraint.

Market creation and supply chain building. The market creation approach focuses on the creation of vibrant markets for products and technologies that can improve the livelihoods of poor people. In order to achieve this, a private sector supply chain which is profitable for all involved players – manufacturers or importers, assemblers, local dealers, installers, end users – needs to be built up. Initially the supply chain cannot be profitable because demand is too low. The challenge of market creation is to foster demand and supply in a coordinated and balanced process. Pro-active market creation processes have resulted in independently functioning markets in various places. However, market creation processes may take longer than the common programme horizons of donors (3-5 years). The experiences show that it can take up to 7 years until markets develop fully and become truly self-sustaining.

Technology adaptation and integration. Focus on market creation and supply chains is often not enough. The integration of the new technologies into the local production systems, and the adaptation of these systems to the opportunities offered by new technologies need substantial efforts and resources. The more complex the necessary changes, the more intensive assistance, advice and experimentation support the users will need. Drip irrigation appears to be more difficult to adopt than for example treadle pumps, particularly for farmers for whom irrigation is completely new. Often drip irrigation needs to be combined with a water lifting technology, either to get access to water at all, or to allow rational filling of the water containers.

Thus, in order to adopt smallholder irrigation technologies, people need not only access to the technologies themselves, but to a whole range of other services, e.g. input and product markets, but also advisory and training services.

Market integration. In some areas the production and marketing of common vegetables appears as profitable enough to motivate investments in smallholder irrigation. In other places, however, the markets are quickly saturated, and the resulting over-supply leads to huge price drops. Thus, exploration and testing of diverse cropping and marketing options which result in optimal profitability, often needs to go along with the introduction of irrigation opportunities.

Combining different water and irrigation technologies. Using the water from drinking water pumps and other supply systems for some market gardening with drip-irrigation, can help to pay for the water supply, although this may also result in water use conflicts. The potentials of drip irrigation often can be best utilised by combining it with suitable pumps and water storage technologies.

Focus on technology vs. focus on soft aspects. A kind of controversy between development practitioners who focus on technologies and those who focus more on social processes is often felt. To achieve results, however, clearly both are equally important – technologies with appropriate qualities and the right price, as well as approaches and strategies that foster their profitable and sustainable use by poor people.

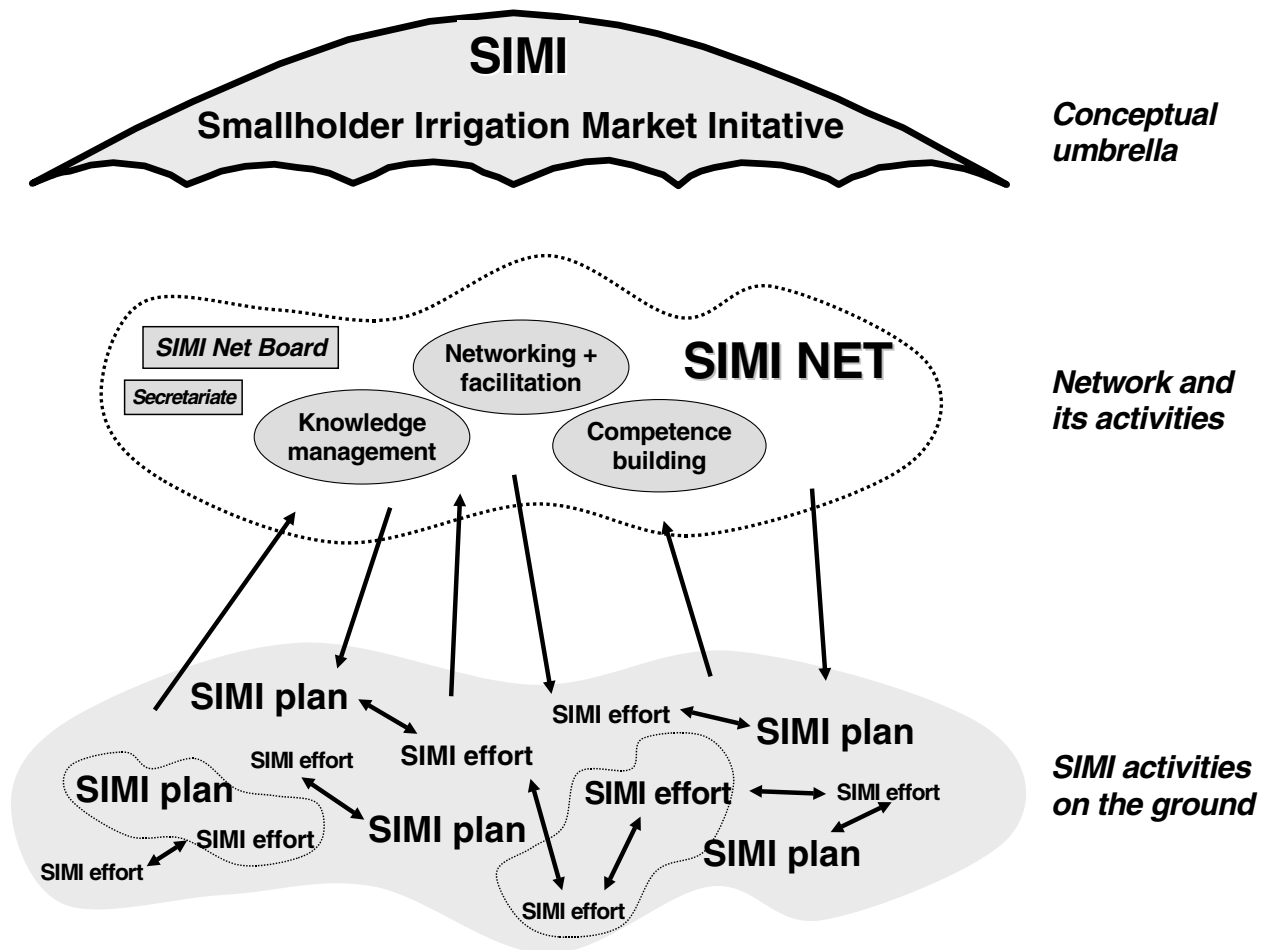
Making useful technologies widely available – how to scale up dissemination processes

The Smallholder Irrigation Market Initiative (SIMI)

20 years of work with market creation for low-cost small-scale irrigation technologies show that these technologies offer great opportunities for asset and income generation to millions of small farmer families in many regions of the world. The challenge is to enable as many of them as possible to seize these opportunities. This requires large-scale action and considerable development resources.

The Smallholder Irrigation Market Initiative (SIMI) is a conceptual umbrella designed to foster broad-based support and partnerships for larger and smaller initiatives that can contribute to meeting the challenge. SIMI has a grand vision – 500 USD additional annual income per family for 30 million smallholder families within the next 15 years through more market integration based on access to irrigation. A number of key matters are at its centre:

- Affordable and appropriate irrigation technologies
- Joint development of opportunities for increased participation of smallholders in markets
- User-driven technology adaptation
- Private sector based technology supply chains and markets
- Ecologically sound production practices



A graphic presentation of the interlinkages between the SIMI concept, the network and smallholder irrigation activities on the ground.

At first sight the vision may look unrealistic to many, but its basis of twenty years of experience with small-scale irrigation technologies, and with market creation and supply chain development, make it look ambitious but realistic at a second look.

Smallholder Irrigation Market Plans (SIMI plans) and local SIMI efforts

Large Smallholder Irrigation Market Initiative business or programme plans (SIMI plans), but also smaller, more local SIMI efforts, should translate the SIMI vision into action.

SIMI plans for five major regions (Gangetic Plains and other river plains in South Asia, Western China, Deccan Plateau in India, Hill Regions of S- and SE-Asia, Shallow Water Areas in Sub-Saharan Africa) have already been drawn up by IDE and Winrock in cooperation with local partners, based on careful on-the-ground research and lessons learnt in previous

work. These SIMI plans outline regional scaling-up processes, and envisage in each region a 3 year take-off phase (2003-2006) followed by a twelve year scale-up phase. The total cost for all five regions over 15 years are budgeted to be 100 million USD. This appears like a lot of money, but if the vision is achieved, the benefit-cost ratio will be high.

The implementation of the SIMI plans requires that many local partners join-in to regional processes. It is planned to conduct collaborative participatory processes so that regional and local concrete action programmes are built from the bottom up. Then donors can be mobilised to support the agreed programmes.

Apart from the large SIMI plans, many smaller local efforts can contribute to achieving the vision, either by integrating SIMI-type activities into their programmes, or by joining hands to develop further regional SIMI plans.

Integrating SIMI and the network idea – towards SIMI Net

Many players express lively interest in participating in the dissemination of smallholder irrigation technologies. The network idea will allow this broad participation, and the SIMI business plans allow these players to work under a common plan and strategy. This is the idea behind merging the original micro-irrigation network idea and SIMI and creating the “SIMI Net”.

The SIMI net is envisaged to be a lean and flexible structure with the overall purpose of linking on the one hand the SIMI vision with the SIMI activities on the ground and on the other hand the many players in the SIMI field with each other. SIMI Net will handle certain functions at a global level while others will be handled at regional levels, depending on what level is most appropriate for a given function.

The accounts from practical experiences presented at the event and summarised above, showed that many people and organisations have a wide range of experiences in different areas that lead to allowing smallholders to tap into the opportunities offered by access to irrigation. Their experience could be useful to many other development initiatives that want to engage in similar activities, but have insufficient expertise. What’s more, there is a lot of potential for learning from each other also among the experienced organisations, since each of them has specific expertise and experience.

Thus one main domain of action of SIMI Net will be to encourage training, coaching and advising of implementing organisations, to facilitate learning and exchange opportunities among practitioners, and to manage information and knowledge to make it accessible to those for whom it is helpful.

Another main domain of action of SIMI Net will be pro-active networking, orchestration and advocacy, in order to bring players together and to muster donor and policy support for putting the SIMI plans and other SIMI efforts into practice.

Under this heading concerted efforts to get many more stakeholders on board in the five regions of the SIMI plans mentioned before, as well as in Latin America and the region of the Horn of Africa, are foreseen to be undertaken as soon as possible. The idea of regional “roadshows” was coined during the event, meaning a series of seminars and events similar to this launching event, where practitioners and donor representatives

can gain understanding of the SIMI ideas and their potential and get the opportunity to join.

How to go on?

Until now a few players were instrumental in driving the SIMI and SIMI Net ideas on. It is important now to broaden not only the support, but real ownership and the willingness to take on more active roles.

A transitional network board or committee of some eight persons (some at the global level and some at the regional level), equipped with a secretariat, will be selected in the coming months, to lead a two year process of building up network operations. Some persons are already nominated as candidates, others will hopefully emerge soon.

The tasks of the transitional board in the next two years will be – always in consultation or co-operation with other stakeholders ...

- ... facilitating the elaboration of concrete action plans for the knowledge management and competence building functions, as well as the networking/facilitation function,
- ... taking the lead in the arrangement of the “roadshows” to muster support and develop action plans for the implementation of the five existing SIMI business plans, and the elaboration of one or two more regional business plans,
- ... elaborating guiding principles for SIMI activities,
- ... assembling a definitive network board representing a broad ownership, particularly in the South.

Conclusions

The participants of the event expressed great interest in, and support for, SIMI Net, particularly in the learning and sharing opportunities. To many participants the advocacy and policy dialogue role looks equally important with a view to mobilise funding for promising and effective interventions.

Concerns were voiced by various persons that the SIMI vision is too large and the SIMI business plans too rigid and top-down. However, if one looks at the vision as a desirable aim, to whose achievement many efforts of different scale can contribute bit by bit, then the apprehensions because of the pretentiousness of the vision will diminish. Also, the business plans do not need to be viewed as rigid blueprints, but can be

taken as a framework that offers space to explore ways, and to grow and thrive, to many diverse SIMI-type efforts.

As a last thought, it would appear valuable to capitalise on the powerful dynamics and energy that became apparent in the course of the event, and quickly offer opportunities for further exchange to the emerging community of practice.

More information

For a range of related documents, people and organisations involved, and any other information please contact:

Urs Heierli, Employment and Income Division, SDC, Berne, Switzerland (urs.heierli@deza.admin.ch)

Paul Polak, IDE, Denver, USA (ppolak@ideorg.org)

Elisabeth Katz, LBL, Lindau, Switzerland (eza@lbl.ch)



Date palms are suitable components for drip irrigated gardens in dry areas of Africa. They give a regular income and, when mature, provide a good micro-climate for vegetable cultivation.



Treadle pump to fill a 200 l drum for a drip irrigation system in Niger.