Sustainet – scaling up sustainable agriculture

Innovative and sustainable agricultural technologies and approaches are needed to feed a growing world population. This is particularly true in view of the effects of climate change. The largest potential for productivity increases exists with small-scale farmers in developing countries (also see IAASTD 2009). Many sustainable technologies and approaches have been developed and tested locally. But how can these be more widely adopted?

To promote innovative and sustainable agricultural technologies and approaches, the German government initiated the Sustainable Agriculture Information Network (Sustainet, www.sustainet.org) in 2003, which was active until 2009. The network's objective was to systematically evaluate, communicate and disseminate successful and innovative best-practice projects of sustainable agriculture in three pilot regions, namely India, Kenya/Tanzania and Peru/Bolivia. A total of 39 best-practice projects – all tailored to small-scale farms – were jointly identified and analysed by the German and local Sustainet partners. In Germany, Sustainet consisted of Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ), Misereor, Brot für die Welt, Welthungerhilfe, Rat für Nachhaltigkeit, Federal Ministry for Economic Cooperation and Development, as well as the Federal Ministry for Food, Agriculture and Consumer Protection. Local partners included various local NGOs and projects implementing the best practices under review.

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Best-practice projects comprised soil conservation, upgrading of soil fertility, integrated animal husbandry, diversification of cultivated crops, protection of biodiversity, integrated pest management, post-harvest improvements, marketing, and strengthening local institutions. The approaches used led to improved yields and productivity, generated higher incomes in rural areas and minimised the negative environmental impacts of agricultural production.

The crucial questions were: How can these best practices in sustainable agriculture be disseminated from small pilot fields to larger areas in order to generate a greater impact? What are the preconditions for a successful scaling up, and what factors hamper dissemination?

■ Disseminating knowledge by storytelling

In all three project regions, the identified best practices were first analysed in a self-assessment by the local partners who had developed these practices and used them in their projects. In so called *writeshops* (see Box on page 22), the results were written down as success stories and then published in books in several languages, including local ones. These publications are not technical manuals, but present the successes in the field of income generation, poverty eradication and protection of the environment. The stories also describe some of the success factors in plain words and depict obstacles for scaling up. The publications are meant to spread the knowledge gained from the best-practice projects.

Photo: Paul Mundy

Sustainet partners discuss and identify best-practice projects.

Writeshops

Writeshops are suitable for documenting practical, illustrated information in a simple language, where a large group of people know a little but no-one knows everything about the subject. Participants may include anyone who has significantly been involved in the experiences to be documented, be it a scientist, a teacher or a farmer. Depending on the size of the end-product, the number of participants can range from 10 to 50. The participants are assisted by a team of facilitators, editors, computer operators and artists. The writeshop's duration depends on the starting point and the end-product: it is possible to put together a brochure or policy brief in one day; a 200-page book may require one or two weeks.

The aim of a writeshop is to develop materials and revise and finally produce a publication in which the expertise of the various participants is represented. Thus, the diversity of skills, organisations and backgrounds is key to ensuring that numerous ideas are represented in the materials produced.

In the run-up to the writeshop, a steering committee lists potential topics and invites resource persons to develop first drafts on each topic.

During the writeshop, each participant presents his or her draft paper to all other participants, who then have a chance to give comments and suggest revisions. After each presentation, the presenters work with the team of editors and artists to revise and illustrate their materials. The revised drafts may then be presented again and subjected to a second round of comments and corrections. The repeated presentations, comments and revision of drafts allow for papers to be reviewed and revised thoroughly, so that the final version can be completed, printed and distributed soon after the writeshop.

The process also allows for new topics to be developed during the writeshop, and topics to be combined, dropped or split into parts. While offering great flexibility, a writeshop also makes considerable demands on participants and staff as it is a very intensive process.

For more information see:
www.writeshops.org, contact: Paul Mundy (paul@mamud.com)

Sustainet used writeshops to document best practices in sustainable agriculture and their potential for scaling up. The participants had previously conducted a self-assessment of their practices (of 50 to 100 pages). The challenge of the writeshop was to extract the most important information, illustrate the examples and bring the texts into an easily understood form with information woven into a combination of stories, narratives and analyses. The results can be found at www.sustainet.org/en/information-office.htm.

Participants of a writeshop include anyone who has been involved in the projects, be it a scientist, a teacher or a farmer.

Photo: Paul Mundy

So far, several hundred copies have been distributed through the networks in each project region. As a result, there has been a growing demand for technical advice relating to practices described. Consequently, the development of additional technical manuals is now being considered by some of the local Sustainet member organisations. This reveals one of the main obstacles for a scaling up of best practices: the lack of knowledge and technical skills.

■ Scaling up assessment tool

In addition to the self-assessment and the storytelling books, the 39 best practice projects have been analysed scientifically by ZALF (Leibniz Centre for Agricultural Landscape Research) to determine general success factors for a scaling up. Based on the results of the empirical analysis, ZALF developed the decision-support tool "ScalA" (Scaling-Up Assessment Tool). ScalA can be applied to different project contexts and environments in the agriculture sector.

Scaling up of agricultural practices is a complex process influenced by different factors. Besides the mere quantitative spread of a best practice technology or approach, it also includes dissemination at the political or organisational level (see Figure on page 23). In order to have a comprehensive but structured assessment, success factors in ScalA have been classified in seven categories, ranging from the attributes of the best practice to the political and institutional framework at national level.
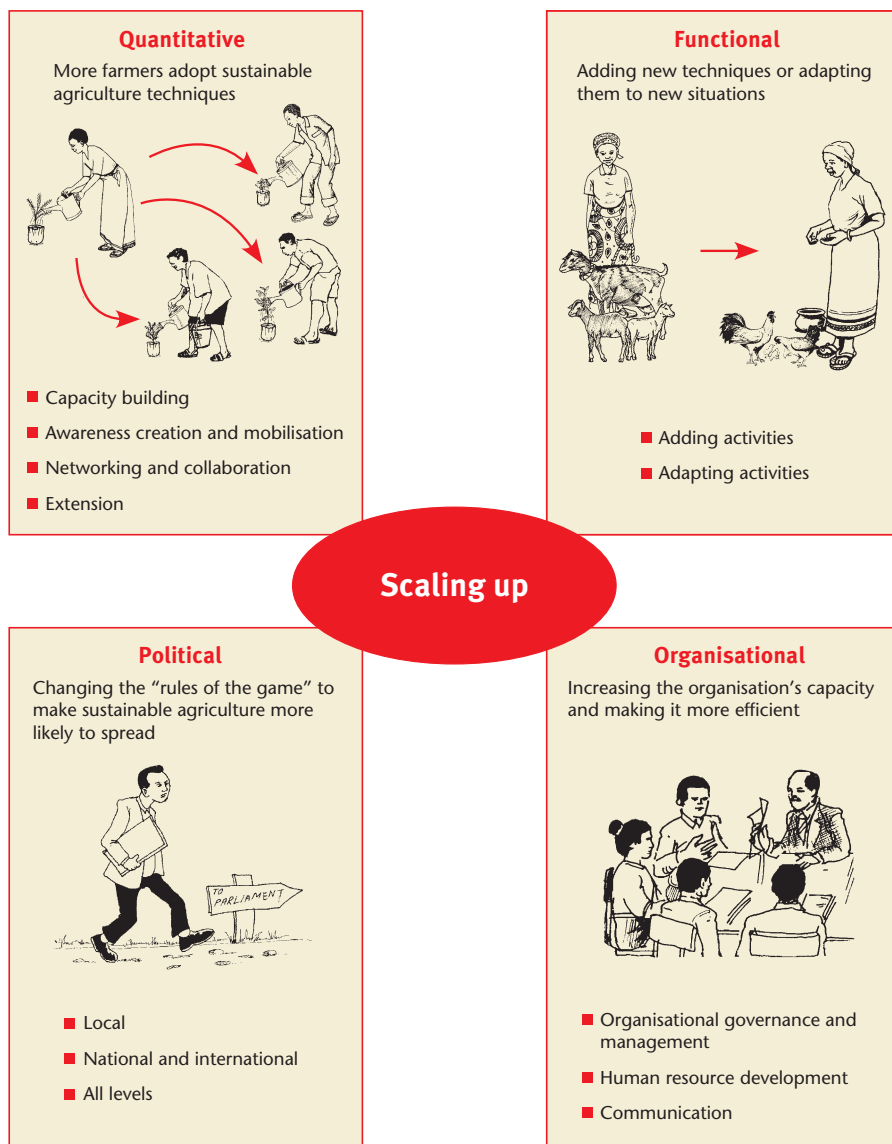
ScalA assesses a total of 59 success factors in these categories. Results of the assessment indicate deviation (in %) from the ideal conditions for scaling up. The smaller the deviation, the higher the probability of a successful scaling up. For a proper assessment, the tool requires access to detailed information on the project approach,

agricultural practices in use, the ecological, economic and social framework conditions, the implementing organisation, and alike.

The diversity of information integrated into the tool allows for a detailed assessment of the scaling-up potential in different project phases. Before the start of a project *(ex-ante)*, different project approaches can be compared with regard to their scaling-up potential, helping donor organisations to identify funding priorities. Since weaknesses can be identified, the tool can also be used at the project design stage, in order to ensure a high probability of success in scaling up. Moreover, ScalA can be applied during project implementation *(ex-durante)* at "adjustment points" such as evaluations and planning of new project phases to identify weaknesses and adjust the scaling-up strategy or approach accordingly.

An additional feature of ScalA is the possibility to make general assessments of the sustainability and the climate change responsiveness of best practices. Thus, ScalA can serve as a selection tool for technologies and approaches that on the one hand can easily be scaled up and on the other hand will secure livelihoods of poor people under climate variability and change. In situations where a large variety of successful and innovative technologies and approaches exist that

Different types of scaling up

Quantitative
More farmers adopt sustainable agriculture techniques

- Capacity building
- Awareness creation and mobilisation
- Networking and collaboration
- Extension

Functional
Adding new techniques or adapting them to new situations

- Adding activities
- Adapting activities

Scaling up

Political
Changing the "rules of the game" to make sustainable agriculture more likely to spread

- Local
- National and international
- All levels

Organisational
Increasing the organisation's capacity and making it more efficient

- Organisational governance and management
- Human resource development
- Communication

do not scale up satisfactorily by themselves, decision-support tools like ScalA can assist with developing appropriate strategies.

Zusammenfassung
Für die Ernährung der wachsenden Weltbevölkerung werden innovative Agrartechnologien und -konzepte benötigt. Dies gilt vor allem angesichts der Folgen des Klimawandels. Das größte Potenzial für Produktivitätssteigerungen liegt in den kleinbäuerlichen Betrieben der Entwicklungsländer. Aber wie können Kleinbauern innovative Konzepte und Technologien am besten nutzen? Das von der deutschen Bundesregierung finanzierte „Sustainable Agriculture Information Network" (Sustainet) hat 39 erfolgreiche Best-Practice-Projekte für nachhaltige Landwirtschaft in Indien, Kenia/Tansania und Peru/Bolivien untersucht. Auf der Grundlage der Ergebnisse dieser Untersuchung wurde ein Bewertungstool für die Umsetzung im großen Maßstab (ScalA) entwickelt. Mit diesem Tool können Strategien für die flächendeckende Einführung von Best Practices für die nachhaltige Landwirtschaft, die auf bäuerliche Kleinbetriebe zugeschnitten sind, erarbeitet werden.

Resumen
Se requieren tecnologías y enfoques agrícolas innovadores para alimentar a una población mundial en crecimiento. Esto es válido en especial si se toma en cuenta los efectos del cambio climático. Los principales potenciales para incrementar la productividad están entre los pequeños agricultores de los países en desarrollo. ¿Pero cómo pueden estos pequeños agricultores obtener mejores beneficios a partir de perspectivas y tecnologías innovadoras? La Red de Información para la Agricultura Sostenible (Sustainet), financiada por el Gobierno Federal alemán, ha analizado 39 proyectos exitosos de mejores prácticas de agricultura sostenible en la India, Kenia/Tanzania y Perú/Bolivia. Sobre la base de estos resultados, se ha desarrollado una herramienta de evaluación para la ampliación de escala (ScalA), que puede utilizarse para concebir estrategias de ampliación de escala para las mejores prácticas de agricultura sostenible adaptadas a pequeñas explotaciones agrícolas.