Typical house in rural Cambodia (Christoph Kaufmann)

Model farmer (كمبوديا)

الوص

Model farms were introduced by a NGO in order to spread knowledge about SLM (compost, System of Rice Intensification SRI, and other technologies) in the project area.

Aims / objectives: Model farms were introduced to Kampong Chhnang Province in order to spread knowledge about SLM Technologies.

Methods: The Approach focuses on various areas of farming, and the model farms are clustered into 4 groups:

1. Compost and System of Rice Intensification focus on rice productivity and soil improvement.
2. SLT (Seasonal Long Training) – growing techniques for different crops, seedling germination, care taking, harvesting, etc.
3. INTEREST – focus on different crops which are mixed, crop rotation (rice-watermelon-corn, e.g.), mulching, cover cropping.
4. Cow raising model farmers – focus on fodder production, vaccination, supplementary feed for the cows, stable construction.

In this case study, the model farmer applies the System of Rice Intensification (SRI) and compost (cluster 1).

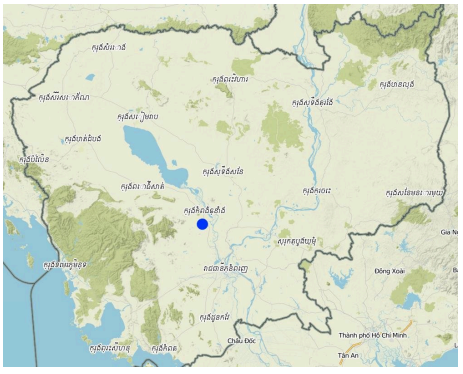
Stages of implementation: Becoming a model farmer consists of different steps. First, different land users who dispose of the required inputs (certain amount of land, labour availability, motivation for innovation) are invited to a training organized by a local NGO. After the training, the model farmers are chosen amongst the participating land users. These newly elected model farmers get further training from the NGO. While implementing the selected Technologies (in this case SRI and compost), the model farmers are subsidized and monitored by the NGO.

Role of stakeholders: The role of the stakeholders is both active and passive. While they are invited to the initial training provided by the local NGO (passive), the land users decide - once they're selected as model farmers - by themselves which Technologies they want to apply on their fields (active).

Other important information: The benefits of this Approach are manifold. Firstly, it helps spreading knowledge about sustainable land management in the project area. In the case of Cambodia this is especially important since much of the agricultural knowledge was lost during the Khmer Rouge regime (1975-1979). Furthermore, the soils in the project area are sandy and show a low fertility. Therefore for example compost making can have a positive long term impact on both the natural and the human wellbeing. Secondly, model farmers can have a positive impact on local institutions. It is for example possible for the farmers to give a report to local authorities where they state what the villagers need most. Furthermore, model farmers can become members of NGOs or local authorities, or monitor other farmers in their activities.

The main disadvantage of the Approach is the problem of sustainability. Model farmers are in

الموقع



الموقع: Rolear Pha-er, Kampong Chhnang, كمبوديا

المرجع الجغرافي للمواقع المختارة

- 104.64523, 12.08942

تاريخ البدء: 2006

سنة الإنهاء: غير متاح

نوع النهج

- ☐ليدي/أصلي
- ☐ مبادرة محلية حديثة/مبتكرة
- ☑ قائم على مشروع/برنامج

close cooperation with the local NGO, and if the NGO stops the coaching, it is not ensured that the implemented Technologies will continue. This is illustrated by many abandoned compost houses in the area. Also, the interviewed model famer expressed that since she became a model farmer, there is more work to do. This can be detrimental in an environment where a high migration rate decreases the available labour force. Last but not least the decision about which Technologies are to be applied on the given model farms are mainly taken by the SLM specialists working for the local NGO. If land users were more involved in the decision-making process, this might have a positive long term impact on the farmers motivation to continue applying the chosen Technologies independently (sustainability).

Typical house in rural Cambodia (Christoph Kaufmann)

Model farmer explaining theApproach. (Christoph Kaufmann)

غايات النهج والبيئة المواتية

الغايات/الأهداف الرئيسية للنهج
The Approach focused on SLM only

On one hand, land users learn about new technologies (e.g. compost, SRI) which have a positive impact on the yields, the soil fertility and in consequence on the income. On the other hand, model farmers are enabled to show these technologies to other land users (knowledge sharing) so these technologies can be spread in the area. One way to share the knowledge are farmer field days where other land users visit the model farms.

The SLM Approach addressed the following problems: Lack of technical knowledge, low agricultural production, low soil fertility.

الشروط التي تمكن من تنفيذ التقنية/التقنيات المطبقة في إطار النهج

- **الإطار القانوني (حيازة الأراضي، وحقوق استخدام الأراضي والمياه)**: The current situation of land use rights and ownership is rather complicated since there are different perceptions coexisting. Therefore, no concluding statement about the influence of this situation on the implementation of model farms can be made.

الظروف التي تعيق تنفيذ التقنية/التقنيات المطبقة في إطار النهج

- **الإطار القانوني (حيازة الأراضي، وحقوق استخدام الأراضي والمياه)**: The process of formalizing land use rights in Cambodia is slow. No relationship between this Approach and land use rights.
- **المعرفة حول الإدارة المستدامة للأراضي، والوصول إلى الدعم الفني**: Other farmers did not have technical knowledge about the technologies Treatment through the SLM Approach: Farmers could learn from the model farmer, monitoring can help to maintain the best practices.

مشاركة وأدوار الأطراف المعنية

الأطراف المعنية بالنهج وأدوارها

ما هي الجهات المعنية / الكيانات المنفذة التي شاركت في النهج؟	حدد الأطراف المعنيين	وصف أدوار الأطراف المعنية
مستخدمو الأراضي المحليون/المجتمعات المحلية	Model farms were installed on existing farms.	The involvement of socially and economically disadvantaged group is indirect. They are not selected as model farmers since they don't have the necessary inputs. However they can benefit from farmer field days or from talking to a model farmer in order to learn about the new technologies.
متخصصون في الإدارة المستدامة للأراضي / مستشارون زراعيون		

منظمة غير حكومية	Society for Community Development in Cambodia SOFDEC	
الحكومة المحلية	The Provincial Department of Agriculture PDA was informed about the approach by SOFDEC.	
الحكومة الوطنية (المخططون، صانعو القرار)	At local level, passive	

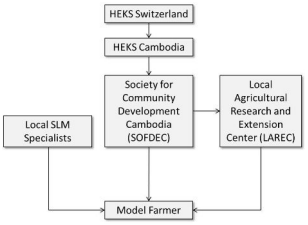
انخراط مستخدمي الأراضي المحليين/المجتمعات المحلية في المراحل المختلفة للنهج

	غير موجود	سلبي	الدعم الخارجي	تفاعلي	التعبئة الذاتية
المبادرة/التحفيز		✓			
التخطيط				✓	
التنفيذ			✓		
الرصد/التقييم		✓			
Research	✓				

The land user attended a workshop organized by SOFDEC/LAREC where he was selected as model farmer. This workshop took place more than 10 years ago.
Farmer plans implementation of compost and SRI
Money from SOFDEC for compost, 15 USD (in-kind contribution by farmer, e.g. labour, some material (wooden pole) and own money to buy cement, iron roof). Training for compost and SRI. SRI field day.
Coaching by SOFDEC
Research is carried out by LAREC and the results, such as new rice varieties, and brought to the model farmer by SOFDEC.

مخطط التدفق

HEKS Switzerland funded the Society for Community Development in Cambodia (SOFDEC), and they support this organisation financially. SOFDEC then funded a research centre on sustainable land management and crops (LAREC) which also maintains an extension service. Together with other local SLM specialists, SOFDEC initiated model farms.



المؤلف: Stefan Graf (Centre for Development and Environment)

اتخاذ القرار بشأن اختيار تقنية الإدارة المستدامة للأراضي

وقد تم اتخاذ القرارات من قبل
- مستخدمو الأراضي وحدهم (المبادرة الذاتية)
- مستخدمو الأراضي بشكل أساسي، بدعم من متخصصي الإدارة المستدامة للأراضي
- جميع الجهات ال□اعلة ذات الصلة، كجزء من نهج تشاركي
- ✓ متخصصون في الإدارة المستدامة للأراضي بشكل أساسي، بعد التشاور مع مستخدمي الأراضي
- متخصصون في الإدارة المستدامة للأراضي بمفردهم
- السياسيون / القادة

تم اتخاذ القرارات بناء على
- تقييم المعرفة الموثقة جيدًا بشأن الإدارة المستدامة للأراضي(اتخاذ القرارات القائمة على الأدلة)
- نتائج البحوث
- خبرة وآراء شخصية(غير موثقة)

الدعم الفني وبناء القدرات وإدارة المعر□ة

شكلت الأنشطة أو الخدمات التالية جزءًا من النهج
- ✓ بناء القدرات/التدريب
- ✓ خدمة استشارية
- ✓ (التطوير التنظيمي) تعزيز المؤسسات
- ✓ الرصد والتقييم
- ✓ البحوث

بناء القدرات/التدريب

تم تقديم التدريب للأطراف المعنية التالية
- ✓ مستخدمو الأراضي
- موظفون ميدانيون/ مستشارون

شكل التدريب
- ✓ في العمل
- من مزارع إلى مزارع
- مناطق العرض
- اجتماعات عامة
- ✓ دورات

المواضيع المغطاة

compost making and on the different steps necessary to implement SRI. The training included both theoretical seminars and on-the-job training.

خدمة استشارية

تم تقديم الخدمة الاستشارية
- ✓ في حقول مستخدمي الأراضي
- في مراكز دائمة

Name of method used for advisory service: Advisory service; Key elements: The Provincial Department of Agriculture delivers some trainings to the farmers in collaboration with SOFDEC , SLM specialists from SOFDEC can get data from the Provincial Department of Agriculture

Advisory service is quite adequate to ensure the continuation of land conservation activities; The involvement of the Provincial Department of Agriculture is supplementary to SOFDEC's work. Therefore, the land conservation activities could also continue without this advisory service.

تعزيز المؤسسات

تم تعزيز/إنشاء المؤسسات

- [ ] لا
- [ ] نعم، قليلا
- [x] نعم، باعتدال
- [ ] نعم، إلى حد كبير

على المستوى التالي

- [x] محلي
- [ ] إقليمي
- [ ] وطني

صف المؤسسة والأدوار والمسؤوليات والأعضاء وما إلى ذلك.

نوع الدعم

- [ ] مالي
- [x] بناء القدرات/التدريب
- [ ] معدات
- [x] decision making

مزيد من التفاصيل

It is possible that model farmers are enabled to influence local institutions through different ways. One possibility is that model farmers can give a report to the village chief and he can give the data to the commune chief. This is a way how the model farmer might influence the decision making within the village. Also, a model farmer can prepare a proposal to the commune chief where he states what the land users need the most (e.g. seeds).
The model farmers can also become facilitators for training other land users on new SLM technologies. Furthermore, the model farmers might be approached by other NGOs or projects to deliver trainings for them, or they might become members of local institutions such as the community council, or join a NGO. It is also possible for model farmers to take part in competitions organized either by NGOs (such as the Excellent Farmer Award) or the Provincial Department of Agriculture.

الرصد والتقييم

Technical aspects were regular monitored by project staff, land users through observations; indicators: Training about how to do the Technology (for SRI and compost only once). Changes in the Technology, challenges for applying the Technology. Economic / production aspects were regular monitored by project staff through measurements; indicators: Yields. SRI: Tillers per plant on 1 m2. Management of Approach aspects were regular monitored by project staff through observations; indicators: SOFDEC trains the farmers how they can monitor other farmers. There were no changes in the Approach as a result of monitoring and evaluation There were few changes in the Technology as a result of monitoring and evaluation: Some Technologies, such as SRI, have been changed considerably since they have first been implemented. However, these changes were not done because of the monitoring, but because of other factors (lack of labour availability, feasibility, etc.).

البحوث

تناول البحث المواضيع التالية

- [ ] علم الاجتماع
- [ ] الاقتصاد / التسويق
- [ ] علم الايكولوجيا
- [x] تكنولوجيا

Research is carried out by the Local Agriculture Research and Extension Centre LAREC. LAREC focus their research on different rice varieties (drought resistant, short breeding), and other plants which could be grown in the area (e.g. mung bean, pumpkin, water melon, stylo grass, etc.). The research is influenced by the demands of land users in the target area.

Research was carried out on station

التمويل والدعم المادي الخارجي

الميزانية السنوية بالدولار الأمريكي لمكون الإدارة المستدامة للأراضي

- [ ] < 2000
- [ ] 10,0000-2,000
- [x] 100,000-10,000
- [ ] 1,000000-100،000
- [ ] > 1,000,000

Precise annual budget: غير متاح

Approach costs were met by the following donors: national non-government (SOFDEC, provides money for compost house and training.): 30.0%; local community / land user(s) (In-kind/money contribution by farmer for compost only): 70.0% Both model farmers and regular farmers are supported within this project, with total costs of around 20,000$. However, not all of the supported farmers are model farmers. In total, there are 64 model farmers within this project, and we calculated expenditures of about 350 US$ per model farmer.

تم تقديم الخدمات أو الحوافز التالية لمستخدمي الأراضي

- [ ] الدعم المالي/المادي المقدم لمستخدمي الأراضي
- [x] إعانات لمدخلات محددة
- [ ] الائتمان
- [ ] حوافز أو وسائل أخرى

	ممول جزئيا	ممول بالكامل
زراعة: بذور	✓	
Brick and cement	✓	

العمل من قبل مستخدمي الأراضي كان

- [x] تطوعي
- [ ] الغذاء مقابل العمل
- [ ] مدفوع نقدا
- [ ] مقابل دعم مادي آخر

تحليل الأثر والتصريحات الختامية

آثار النهج

	لا	نعم، قليلا	نعم، باعتدال	نعم، إلى حد كبير
هل ساعد النهج مستخدمي الأراضي على تنفيذ وصيانة تقنيات الإدارة المستدامة للأراضي؟ Compost has a positive impact on the soil, which results in increased production. However, due to a lack of organic matter to make compost with, the land users still use chemical fertilizer in order to increase the rice yields. As for SRI, the yields can be increased while less seeds are used. Also, the use of compost improves soil fertility. However, this Technology needs more labour input, which results in an adaptation of the Technology by the farmer (Technology is only partly carried out as intended by the SLM specialists, and each farmer does it a bit differently).				☑
هل ساهم النهج في تمكين الفئات المحرومة اجتماعيا واقتصاديا؟ In this area, wealth is usually linked to the amount of land a land user can work on. Poorer farmers that live in the neighbourhood of model farmers can copy the newly implemented technologies and benefit from their positive impacts. However, the likelihood that other farmers implement new technologies depends largely on their complexity and the required inputs. Some technologies are therefore easier and more likely to be implemented by socially and economically disadvantaged groups.			☑	
هل أدى النهج إلى تحسن في مسائل حيازة الأراضي / حقوق المستخدمين التي أعاقت تنفيذ تقنيات الإدارة المستدامة للأراضي؟ No relationship between this Approach and land use rights. The problem is unlikely to be overcome in the near future. The process of formalizing land use rights in Cambodia is slow.	☑			
Did other land users / projects adopt the Approach?	☑			

المحفز الرئيسي لقيام مستخدمي الأراضي بتنفيذ الإدارة المستدامة للأراضي

- [x] زيادة الإنتاج
- [ ] زيادة الربح (القدرة)، وتحسين نسبة التكلفة إلى العائد
- [ ] الحد من تدهور الأراضي
- [ ] الحد من مخاطر الكوارث
- [ ] انخفاض عبء العمل
- [ ] المدفوعات/ الإعانات
- [ ] القواعد واللوائح (الغرامات) / الإنفاذ
- [ ] الوجاهة والضغط الاجتماعي/التماسك الاجتماعي
- [ ] الانتماء إلى حركة/ مشروع/ مجموعة/ شبكات
- [x] الوعي البيئي
- [ ] العادات والمعتقدات والأخلاق
- [ ] تعزيز المعرفة والمهارات في مجال الإدارة المستدامة للأراضي
- [ ] تحسينات جمالية
- [ ] التخفيف من حدة الصراع
- [x] well-being and livelihoods improvement

استدامة أنشطة النهج

هل يمكن لمستخدمي الأراضي الحفاظ على استدامة ما تم تنفيذه من خلال النهج (بدون دعم خارجي)؟

- [ ] لا
- [x] نعم
- [ ] غير مؤكد

The land user of this case study is not subsidized any more, but she still continues with the technologies. However, the continuation of the activities depends largely on the personal motivation and the available resources (labour force). Some land users do not continue with compost once they are not monitored anymore.

الاستنتاجات والدروس المستفادة

نقاط القوة: وجهة نظر مستخدم الأرض

- It is good that model farmer are selected in the village since other farmers can learn from them. (How to sustain/ enhance this strength: Model farmers have to lobby with village leader, commune authority and with the NGO to link them with other organisations and Governmental Agencies.)

نقاط القوة: وجهة نظر جامع المعلومات أو غيره من الأشخاص الرئيسيين لمصدر المعلومات

- SLM Technology can be tested in-situ. (How to sustain/ enhance this strength: More innovative technologies could be tested in collaboration with farmers.)
- Community sense between the farms is strengthened. (How to sustain/ enhance this strength: Community councils could be created.)
- Model farmers are like a bridge between the NGO and other farmers. Projects from NGOs can be carried out more effectively. (How to sustain/ enhance this strength: Create a proper mechanism between the model farmers, the village and commune authorities, and the NGO in order to ensure the sustainability of the model farmer approach beyond the NGOs involvement.)
- Other farmers can learn SLM technologies without being directly trained by the NGO (How to sustain/ enhance this strength: Continue with the Approach and seek support from village authorities.)

نقاط الضعف / المساوىء / المخاطر: وجهة نظر مستخدم الأرضكيفية التغلب عليها

- The NGO and external people/farmers put workload on model farmers. Provide compensation to model farmer, show him the benefits of these new Technologies, enable him to participate in local decision making processes.

نقاط الضعف / المساوىء / المخاطر: وجهة نظر جامع المعلومات أو غيره من الأشخاص الرئيسيين لمصدر المعلوماتكيفية التغلب عليها

- Some Technologies are abandoned once there is no more support from the NGO. Include long-term monitoring. Also, this monitoring can be carried out by the model farmers or other farmers in the village.
- The suggested Technologies require more work and are sometimes counter-intuitive to the model farmers (e.g. SRI). Provide compensation to model farmer, show him the benefits of these new Technologies, enable him to participate in local decision-making processes.
- The approach is not really participatory since the specialist decide which technologies should be implemented. First consult the farmers about their needs. Also, include the farmers in case they know about innovative Technologies.

المراجع

جامع المعلومات
Christoph Kaufmann

المحررون

المُراجع
David Streiff

تاريخ التوثيق: 27 أكتوبر، 2014

اخر تحديث: 3 أغسطس، 2017

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Mesa Say - متخصص في الإدارة المستدامة للأراضي
Sreytouch Bin - متخصص في الإدارة المستدامة للأراضي
Lean Hak Khun - متخصص في الإدارة المستدامة للأراضي

WOCAT الوصف الكامل في قاعدة بيانات
https://qcat.wocat.net/ar/wocat/approaches/view/approaches_2498/

بيانات الإدارة المستدامة للأراضي المرتبطة
Technologies: Compost application on rice fields https://qcat.wocat.net/ar/wocat/technologies/view/technologies_1218/
Technologies: Adapted System of Rice Intensification (SRI) principles in Kampong Chhnang https://qcat.wocat.net/ar/wocat/technologies/view/technologies_1224/
Technologies: Mulching with water hyacinth (Eichhornia crassipes) after the monsoon floods. https://qcat.wocat.net/ar/wocat/technologies/view/technologies_1223/
Technologies: Compost application on rice fields https://qcat.wocat.net/ar/wocat/technologies/view/technologies_1218/
Technologies: Mulching with water hyacinth (Eichhornia crassipes) after the monsoon floods. https://qcat.wocat.net/ar/wocat/technologies/view/technologies_1223/
Technologies: Adapted System of Rice Intensification (SRI) principles in Kampong Chhnang https://qcat.wocat.net/ar/wocat/technologies/view/technologies_1224/

تم تسهيل التوثيق من قِبَل
المؤسسة
- CDE Centre for Development and Environment (CDE Centre for Development and Environment) - سويسرا
- Local Agricultural Research and Extension Centre (LAREC) - كمبوديا
- Society for Community Development in Cambodia (SOFDEC) - كمبوديا

المشروع
- غير متاح

روابط للمعلومات ذات الصلة المتوفرة على الإنترنت
- SOFDEC: www.sofdec.org