Participants in a farmers' training of trainers-group work on nutrient (Basu Dev Regmi)

Farmer field schools on integrated plant nutrient systems (ເນໂປ)

Krishak Pathsala (Nepali)

ຄຳອະທິບາຍ

Participatory and collaborative learning through the farmer field school approach

There are different ways of carrying out agricultural extension. Farmer field schools represent a participatory approach that directly reaches farmers and addresses their day-to-day problems. The concept of farmer field schools builds on the belief that farmers are the main source of knowledge and experience in carrying out farm operations, in contrast to conventional top-down approaches that place most value on scientists' findings. The term 'farmer field schools' came from the Indonesian expression 'sekolah lapangan' which means 'field school'. It is a group based learning approach, which brings together concepts and method of agro-ecology, experiential education, and community development. The first field schools were established in 1989 in central Java when 50 plant protection officers tested and developed field training methods as part of an integrated pest management (IPM) training of trainers course. Two hundred field schools were established in that season involving 5,000 farmers. The following season, in 1990, an additional 45,000 farmers joined field schools run by 450 crop protection officers.
The same approach is being used in Nepal's integrated pest management programme. Several consultation meetings and workshops were held at national level to put the integrated nutrient management concept into practice. These meetings led to farmer field schools being recognised as an appropriate approach for putting this concept into practice. The approach was piloted in 2000 and 2001 and fully initiated in 2002 when 32 farmer field schools were run with support from SSMP. As far as SSMP knows, farmer field schools on integrated plant nutrient systems have been run since SSMP's involvement. The Government of Nepal's National Fertiliser Policy now recognises integrated plant nutrient systems as a concept to improve the efficient use of different nutrient inputs, and farmer field schools as an appropriate technology and extension approach for soil and plant nutrient management in Nepal. So far some 226 farmer field schools have been run in Nepal on integrated plant nutrient systems reaching more than 5,000 households.

ສະຖານທີ

ສະຖານທີ: Midhills, ເນໂປ

ການຄັດເລືອກພື້ນທີ ທີ່ອີງໃສ່ຂໍ້ມູນທາງພູມີສາດ

- 85.518, 27.75

ວັນທີເລີ່ມຕົ້ນ: n.a.

ປີຂອງການສິ້ນສຸດ: n.a.

ປະເພດຂອງແນວທາງ

- ພື້ນເມືອງ / ຫຍ້ງຫ້ຳ
- ການລິເລີ່ມ ພາຍ ນປະເທດ / ນະວັດຕະ ກ
- ພາຍ ໂຄງການ / ແຜນງານ

Farmers observing a caulifl ower plot during a regular farmer field school session (Steffen Schulz)

ເປ□ າຍຂອງແນວຫາ ແລະ ການປົກປັກຮັກສາສິ□ ແວດລ□ ມ

ເປົ້າໝາຍ / ຈຸດປະສົງຫຼັກໃນການຈັດຕັ້ງປະຕິບັດແນວທາງ

Transfer of technology to farmers on soil and plant nutrition management. Empowerment of farmers. Production of healthy crops without negative environmental effects.

The SLM Approach addressed the following problems: Lack of effective and efficient ways of transferring technologies to farmers. Conventional approach of technology transfer, where farmers are believed to have poor knowledge and skills. Farmers are always perceived as a recipient of technology and knowledge

ເງື□ ອນໄຂທີ່ສະໜັບສະໜູນໃຫ້ການຈັດຕັ້ງປະຕິບັດເຕັກໂນໂລຢີ ບົນພື້ນຖານແນວທາງ

ເງື□ ອນໄຂທີ່ເຊື□ ອງຊ□ ອນໃຫ້ການຈັດຕັ້ງປະຕິບັດເຕັກໂນໂລຢີ ບົນພື້ນຖານແນວທາງ

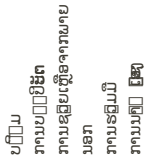
- **ສັງຄົມ / ວັດທະນະທຳ / ມາດຕະຖານ ແລະ ຄຸນຄ່າທາງສາສະໜາ**: Group: unintegrated, less organised group
- **ຄວາມຮູ້ກ່ຽວກັບການຄຸ້ມຄອງ ທີ□ ດິນແບບຍືນຍົງ, ການເຂົ້າເຖິງການສະໜັບສະໜູນ ທາງດ້ານວິຊາການ**: Soil-fertility management, plant nutrient dynamics
- **ອື□ ນໆ**: Extension: Top-down, technology-centred, not farmer-centred

ການມີສ□ ວນຮ□ ວມ ແລະ ບົດບາດຂອງພາກສ□ ວນທີ□ ກ□ ຽວຂ□ ອງທີ□ ມີສ□ ວນຮ□ ວມ

ພາລະບົດບາດຂອງພາກສ່ວນທີ່ກ່ຽວຂ້ອງ ທີ□ ມີສ່ວນຮ່ວມໃນການຈັດຕັ້ງປະຕິບັດແນວທາງ

ແມ່ນໃຜ / ພາກສ່ວນໃດ ທີ□ ເປັນເຈົ້າການ ໃນການຈັດຕັ້ງປະຕິບັດ ວິທີການ?	ລະບຸ ພາກສ່ວນທີ□ ກ□ ຽວຂ□ ອງ	ພັນລະນາ ບົດບາດ ໜ້າທີ ຂອງພາກສ່ວນທີ□ ກ□ ຽວຂ□ ອງ
ຜູ□ ນ□ ຳ □ ຊົນ □ ນ□ ງ□ ນ / ຊຸມຊົນທ□ ງ□ ນ		
ຜູ□ ຊ□ ຽວຊານ ການນຄຸມຄອງ ທີ□ ດິນແບບຍືນຍົງ / ທີ□ ປຶ□ ກສາດ□ ານ ກະສິກ□		

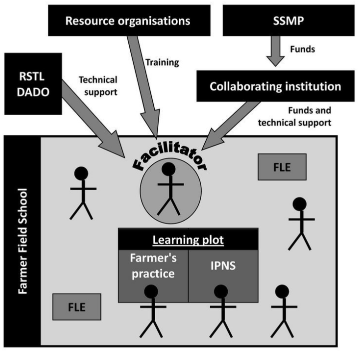
ການລວບລວມເອົາຜູ້ນຳໃຊ້ທີ□ ດິນໃນທ□ ອງຖິ□ ນ/ຊຸມຊົນທ□ ອງຖິ□ ນ ໃນການຈັດຕັ້ງປະຕິບັດແນວທາງ ແຕ່ລະໄລຍະ



ການເລີ□ ມຕົ□ ນ / ແຮງຈູ□ ຈ	Participatory approach: group discussions involving all local stakeholders
ການວາງແຜນ	Orientation workshop involving all stakeholders - farmers participation is crucial
ການປະຕິບັດ	Farmers are the key actors with trained staff of collaborating institutions (CI) facilitating the process
ຕິດຕາມກວດກາ / ການປະເມີນຜົນ	Farmers evaluate and monitor jointly on a regular basis
Research	Farmer-led experimentation based on local needs and context

ແຜ່ນວາດສະແດງ

Farmer field schools are usually facilitated by a field staff member of a collaborating institution and funded by SSMP. The facilitators are supported technically by the regional soil testing



ການຕັດສິນໃຈໃນການເລືອກເຕັກໂນໂລຢີ ການຄຸ້ມຄອງທີ່ດິນແບບຍືນຍົງ

ການຕັດສິນ□ ຈໂດຍ

- [ ] ຜູ້ນຳ□ ຊີນຜູ້ດຽວ (ການລິເລີ່ມດ້ວຍຕົນເອງ)
- [ ] ຜູ້ນຳ□ ທີ່ດິນຫຼັກ, ການສະ□ັບສະ□ ູນໂດຍຜູ້ຊ່ຽວຊານ ການນຳ□ ທີ່ດິນແບບຍືນຍົງ
- [ ] ພາກສ່ວນກ່ຽວຂ້ອງທັງ□ົດ, ເປັນສ່ວນ□ຶ່ງ ຂອງວິທີທາງແບບມີສ່ວນຮ່ວມ
- [ ] ຜູ້ຊ່ຽວຊານ ຫຼັກດ້ານການຄຸ້ມຄອງ ທີ່ດິນແບບຍືນຍົງ, ມີການຕິດຕາມປຶກສາຫາລືກັບ ຜູ້ນຳ□ ທີ່ດິນ
- [x] ຊ່ຽ□ວຊານສະເພາະດ້ານການຄຸ້ມຄອງ ດິນແບບຍືນຍົງຜູ້ດຽວ
- [ ] ນັກການເມືອງ / ຜູ້ນຳ

ການັຕສິນ□ ຈິນພື້ນຖານ

- [ ] ປະເມີນເອກະສານ ຄວາມຮູ້ກ່ຽວກັບ ການຄຸ້ມຄອງ ທີ່ດິນແບບຍືນຍົງ (ຫຼັກຖານທີ່□ ຊ່ວຍ□ ນການັຕສິນ□ ຈ)
- [ ] ຜົນທີ່□ ຮັບ ຈາກການຄົ້ນຄວ້າ
- [ ] ປະສົບການສ່ວນບຸກຄົນ ແລະ ຄວາມຄິດເຫັນ (ທີ່ບໍ່□ມີເອກະສານ)

ການສະ□ັບສະ□ ູນັເຕໂນໂລຢີ, ການສ້າງຄວາມອາດສາມາດ ແລະ ການຄຸ້ມຄອງຄວາມຮູ້

ກິດຈະກຳ ດັ່ງລຸ່ມນີ້ ແມ່ນເປັນພາກໜຶ່ງຂອງແນວທາງ

- [x] ການສ້າງຄວາມສາມາດ / ການຝຶກອົບຮົມ
- [ ] ການບໍ□ລິການ□ ທີ່ປຶກສາ
- [x] ສະຖາບັນການສ້າງຄວາມເຂັ້ມແຂງ (ການພັດທະນາອົງການຈັດຕັ້ງ)
- [x] ຕິດຕາມກວດກາ ແລະ ປະເມີນຜົນ
- [x] ການຄົ້ນຄວ້າ

ການສ້າງຄວາມອາດສາມາດ / ຝຶກອົບຮົມ

ໄດ້ສະໜັບສະໜູນຝຶກອົບຮົມໃຫ້ແກ່ພາກສ່ວນກ່ຽວຂ້ອງດັ່ງລຸ່ມນີ້

- [x] ຜູ້ນຳ□ ດິນ
- [x] ພະນັກງານພາກສະ□ ານ/ ທີ່ປຶກສາ

ຮູບແບບການຝຶກອົບຮົມ

- [ ] ການເຮັດຕົວຈິງ
- [x] ຕົວຕໍ່ຕົວ
- [x] ເນື້ອທີ່ສວນທົດລອງ
- [x] ກອງປະຊຸມ
- [x] ຫຼັກສູດ

ກວມເອົາຫົວຂໍ້

A training of trainers course is provided to selected staff from the collaborating institutions who have been involved substantially in agriculture development and farming practices activities. Seven days basic training on integrated plant nutrient systems and farmer field schools is provided. There is provision for a sharing forum at district level based on the demand of staff involved in conduc

ຄວາມເຂັ້ມແຂງຂອງສະຖາບັນ

ສະຖາບັນ ໄດ້ຮັບການສ້າງຄວາມເຂັ້ມແຂງ

- [ ] ບໍ່□ມ
- [ ] ມີ, □ ້ອຍ□ົງ
- [ ] ມີ, ພໍສົມຄວນ
- [x] ມີ, ຫຼາຍ

ໃນລະດັບດັ່ງລຸ່ມນີ້

- [x] ທ້ອງຖິ່ນ
- [ ] ລະດັບພາກພື້ນ
- [ ] ແຫ່ງຊາດ

ອະທິບາຍສະຖາບັນ, ພາລະບົດບາດແລະຄວາມຮັບຜິດຊອບ, ສະມາຊິກ, ແລະອື່ນໆ.

ຮູບແບບການສະໜັບສະໜູນ

- [x] ທາງດ້ານການເງິນ
- [x] ການສ້າງຄວາມອາດສາມາດ / ການຝຶກອົບຮົມ
- [ ] ອຸປະກອນ

ລາຍລະອຽດເພີ່ມເຕີມ

Local level organisations are involved in carrying out the farmer field schools. Local institutions are supported financially and technically by SSMP. The major aim of this approach is to build local

ການຕິດຕາມ ແລະ ປະເມີນຜົນ

socio-cultural aspects were regular monitored through observations; indicators: status bio-physical aspects were regular monitored through measurements; indicators: nitrate, nitrogen, pH, organic matter, P and K, yield measurements technical aspects were regular monitored through observations; indicators: cash income economic / production aspects were regular monitored through observations

ການຄົ້ນຄວ້າ

ການວິ□ ຈ□ັຍການຮັກສາຫົວຂ□□ປັນ

- [ ] ສັງຄົມ
- [ ] ເສດຖະສາດ / ການຕະຫຼາດ
- [ ] ລະບົບນິເວດ
- [x] ເຕັກໂນໂລຢີ

It is difficult to compare results if many treatments are applied at the same time in a plot. Therefore, it is always advised that component trials are run for different treatments. Such trials make for easier understanding of the different treatments and enable farmers to see the effects of particular treatments.

ການສະ□ັບສະ□ ູນທາງດ້ານການເງິນ ແລະ ອຸປະກອນຈາກພາຍນອກ

ງົບປະມານປະຈຳປີ ໃນກິດຈະກຳ ການຄຸ້ມຄອງທີ່ດິນແບບຍືນຍົງ ທີ່ເປັນສະກຸນເງິນໂດລາ

ການບໍລິການ ຫຼື ສິ່ງກະຕຸກຊຸກຍູ້ ດັ່ງລຸ່ມນີ້ ແມ່ນໄດ້ສະໜອງໂດຍຜູ້ນຳໃຊ້ທີ່ດິນເອງ

- [ ] ການສະ□ັບສະ□ ູນທາງດ້ານການເງິນ / ອຸປະກອນ ສະ□ ອງ□ ໃຫ້ຜູ້ນຳ□ທີ່ດິນ

- < 2,000
- 2,000-10,000
- 10,000-100,000
- 100,000-1,000,000
- > 1,000,000

Precise annual budget: n.a.

Approach costs were met by the following donors: local government (district, county, municipality, village etc) (participants): 20.0%; other (development project): 80.0%

- ຫຼຸດປັດ ຈັຍເຂົ້າ
- ສົ່ມເຂ້ົາ
- ສ້ັງ ເຄ ຼ ເຄ ຼ ມ ສ ັ

ການວິເຄາະຜົນກະທົບ ແລະ ສະຫຼຸບລວມ

ຜົນກະທົບຂອງການນ ໍາໃຊ້ແນວທາງ

ການຈັດຕ ັ ປະຕິບັດ ວິທີທາງ ສາມາດຊ ຍ ຼ ມ ີ ນ ການັ ຕ ັ ປະຕິບັດ ແລະ ບ ໍ ລ ັ ສ ເຕ ກ ໂ ໂ ລ ີ ການ ຸ ຄ ງ ທ ີ ແ ບ ບ ຍ ງ ີ

ບ ີ, ເ ີ ນ ກ ີ, ເ ີ ນ ກ ີ, ເ ີ ນ

Attendance at farmer field schools has led to many farmers adopting practices that have improved the fertility status of their soils and have increased crop productivity. Most of these farmers have realised the need for the judicious use of local and external resources to increase crop production

ສ ງ ກ ຸ ກ ຸ ກ ຍ ູ ໃ ໍ ຜ ູ ນ ໍ ໃ ຊ ທ ີ ດ ນ ໃ ນ ການ ປ ຕ ິ ບ ັ ດ ການ ຄ ຸ ມ ຄ ອ ງ ທ ີ ດ ນ ແ ບ ບ ຍ ງ ື

n.a.

ຄ ວ ມ ຍ ງ ຍ ນ ຍ ງ ຂ ອ ງ ການ ຈ ັ ດ ຕ ັ ງ ປ ະ ຕ ິ ບ ັ ດ ກ ິ ດ ຈ ະ ກ ໍ າ ຂ ອ ງ ແ ນ ວ ທ າ ງ

ຜ ູ ຊ ຍ ຼ ມ ີ ຄ ີ ນ ສ າ ມ າ ດ ຈ ັ ດ ຕ ັ ງ ປ ະ ຕ ິ ບ ັ ດ ຕ າ ມ ແ ນ ວ ທ າ ງ ໄ ດ ຍ ປ ະ ມ ານ ສ ະ ດ ວ ກ ສ ະ ບ າ ຍ ຫ ລ ັ ງ ຈ າ ກ ການ ສ ະ ໜ ັ ບ ສ ະ ໜ ຸ ນ ຈ າ ກ ພ າ ກ ສ ່ ວ ນ ພ າ ຍ ນ ອ ກ)?

- ບ ໍ ່ ມ
- ແ ມ ່ ນ
- ບ ໍ ່ ຮ ູ ້ ຈ ັ ກ

Capacity remains at the local level so that farmers are able to run farmer field schools themselves.

ບົດສະຫຼຸບ ແລະ ບົດຮຽນທ ີ ຮ ຽ ນ

ຄ ວ ມ ເ ຂ ັ ມ ແ ຂ ງ: ທ ັ ດ ສ ະ ນ ະ ມ ູ ມ ມ ອ ງ ຂ ອ ງ ຜ ູ ້ ນ ໍ າ ໃ ຊ ້ ທ ີ ດ ນ

ຄ ວ ມ ເ ຂ ັ ມ ແ ຂ ງ: ທ ັ ດ ສ ະ ນ ະ ມ ຸ ມ ມ ອ ງ ຂ ອ ງ ຜ ູ ້ ປ ້ ອ ນ ຂ ໍ ມ ູ ນ ເ ອ ງ

- Farmers are the source of knowledge; farmers adopt technologies based on their context (How to sustain/ enhance this strength: Involve farmers in a more participatory way)
- Participatory approach
- Farmers decide the pace of implementation and what should be done
- The schools stress the importance of using local resources to reduce dependency on external resources
- Increased effi ciency and effectiveness of local resources use

ຈ ຸ ດ ອ ່ ອ ນ / ຂ ້ ເ ສ ຍ / ຄ ວ ມ ສ ່ ຽ ງ: ທ ັ ດ ສ ະ ນ ະ ມ ູ ມ ມ ອ ງ ຂ ອ ງ ຜ ູ ້ ນ ໍ າ ໃ ຊ ້ ທ ີ ດ ນ ວ ິ ທ ີ ກ ານ ແ ກ ້ ໄ ຂ ແ ນ ວ ໃ ດ

ຈ ຸ ດ ອ ່ ອ ນ / ຂ ້ ເ ສ ຍ / ຄ ວ ມ ສ ່ ຽ ງ: ທ ັ ດ ສ ະ ນ ະ ມ ຸ ມ ມ ອ ງ ຂ ອ ງ ຜ ູ ້ ປ ້ ອ ນ ຂ ໍ ມ ູ ນ ເ ອ ງ ວ ິ ທ ີ ກ ານ ແ ກ ້ ໄ ຂ ແ ນ ວ ໃ ດ

- Farmer field schools need time and their costs are higher than other similar approaches
- Non-technical staff are often involved in carrying out farmer field schools Ensure capacity building and regular sharing forums

ເອກກະສານອົ້ງອີ້ງ

ການລວບລວມ
Richard Allen

Editors

ການທົບທວນຄືນ
Laura Ebneter

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ບຸກຄົນທີ່ສຳຄັນ

Richard Allen (richkga@gmail.com) - ຜູ້ຊ່ຽວຊານ ຄຸ້ມການຄຸ້ມຄອງ ທີ່ເປັນແບບຍືນຍົງ
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ການບັນຍາຍລາຍລະອຽດ ໃນຖານຂໍ້ມູນ ຂອງ WOCAT

https://qcat.wocat.net/lo/wocat/approaches/view/approaches_2351/

ຂໍ້ມູນການເຊື່ອມໂຍງຂໍ້ມູນການຄຸ້ມຄອງການນຳໃຊ້ດິນແບບຍືນຍົງ

Technologies: Improved cattleshed for urine collection https://qcat.wocat.net/lo/wocat/technologies/view/technologies_1752/
Technologies: Legume integration https://qcat.wocat.net/lo/wocat/technologies/view/technologies_1753/
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Technologies: Improved compost preparation https://qcat.wocat.net/lo/wocat/technologies/view/technologies_1750/
Technologies: Better quality farmyard manure through improved decomposition
https://qcat.wocat.net/lo/wocat/technologies/view/technologies_1759/
Technologies: Improved farmyard manure through sunlight, rain and runoff protection
https://qcat.wocat.net/lo/wocat/technologies/view/technologies_1756/
Technologies: Cultivation of fodder and grasses https://qcat.wocat.net/lo/wocat/technologies/view/technologies_1757/
Technologies: Urine application through drip irrigation for bitter gourd production
https://qcat.wocat.net/lo/wocat/technologies/view/technologies_1751/
Technologies: Better quality farmyard manure through improved decomposition
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ເອກກະສານ ແມ່ນໄດ້ອຳນວຍຄວາມສະດວກໂດຍ

ສະຖາບັນ
- HELVETAS (Swiss Intercooperation)

ໂຄງການ
- Sustainable Soil Management Programme, Nepal (SSMP)

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