

Bed Prasad Khatiwada, a Nepalese horticulturalist, has received LEISA Magazine ever since he was a student, and has regularly used it as a source of information. After reading an article on plant clinics in issue 23.4, he wrote to the author of the article for some additional information. What he got was much more: successful plant clinics are now being implemented in several regions of Nepal.



Being part of a worldwide network

Bed P. Khatiwada

Since 1997, LEISA Magazine has been one of my best sources of information. It provided reference material for my studies and later work at the Institute of Agriculture and Animal Sciences of Tribhuvan University. After my studies I joined the Society for Environment Conservation and Agricultural Research and Development Nepal (SECARD Nepal), a not-for-profit, non-governmental organisation that aims to develop agricultural systems based on an optimal use of local resources. In a project promoting organic agriculture, we used LEISA Magazine to understand and introduce ideas such as the integration of grain legumes into cropping systems, and the management of biodiversity.

Being a regular subscriber of LEISA Magazine, I came across an article called "Plant clinics for healthy crops" in issue 23.4. I went through that article several times and looked for additional information on the internet. I was convinced that plant clinics were an appealing idea, considering the limitations of the extension system in Nepal. Plant clinics seemed to give the possibility to reach a large audience in a short time and provide a service at the time and place where it is most needed. Equally

appealing was that the advice is based on a thorough observation: a sample (a diseased or infested plant part) can help to avoid that farmers misuse chemical inputs, and can help reduce production costs.

Trying it out...

I shared the information with my colleagues and especially with Surendra Dhakal, my supervisor and team leader. We

agreed to try plant clinics out as part of the Lamjung Food Security project, a project implemented by several organisations and funded by World Vision UK. We discussed the idea with farmer groups and with governmental and non-governmental organisations, looking with them at the potential benefits offered by plant clinics.

The idea of setting up plant clinics was embraced enthusiastically, but we



The original article, "Plant clinics for healthy crops", as published in LEISA Magazine, Vol. 23.4, December 2007.



Photo: Pradip Neupane

Plant doctors Raj Kumar Adhikari and Bishnu Pokhrel providing technical services to women farmers in Dhading.

Plant clinics and plant doctors

Nepalese farmers face numerous problems related to pests and diseases, and plants often suffer from nutritional or climatic stress. These problems are almost always interrelated and therefore difficult to diagnose. In addition, extension agents need to cover very large areas, so it is impossible to provide a good advisory service to all farmers. Many farmers turn to the shops that sell pesticides and fertilizers, where they are recommended to use broad-spectrum fungicides or micronutrients. Malpractice is common, resulting in an unnecessary use of agrochemicals and in higher production costs.

The plant doctor can be an extension officer as well as a farmer. He or she starts by gathering information, examining the symptoms and asking the farmer for specific information. This method is called "field diagnosis". After systematic elimination of the most unlikely causes first, the plant doctor makes a recommendation, providing specific advice. Some problems may require a visit to the field or further investigation. Visiting a plant clinic is easy for farmers, they know when the doctor will be there and they can go whenever they have a problem. Information flows in many directions, with farmers actively communicating with other farmers and with the doctors.

only had a small problem: we knew very little about their implementation. I sent an e-mail to one of the authors of the December 2007 article, Eric Boa, head of Global Plant Clinic (GPC). He wrote an encouraging e-mail back, mentioning all the critical factors to be considered before starting a plant clinic. My colleagues and I were further encouraged by the interaction that followed. I was expecting suggestions, comments and perhaps some guidelines, but they were even willing to provide training!

This training took place in December 2008 in Besishahar, in the district of Lamjung, and it was given by Robert Harling, together with Eric Boa himself. Twenty-three people attended the course, including agrochemical dealers, government agricultural officers, students from the Institute for Agriculture and Animal Sciences, staff of World Vision International Nepal and representatives of organisations working on livelihood projects in Lamjung. The "how to become a plant doctor" course looked at the best ways to identify the cause of a plant health problem. Participants practiced interviewing farmers, filling out the clinic register and making recommendations to solve plant health problems.

As part of the training course, two pilot clinics were set up: one in Sundarbazar and one in Besishahar. During these

clinics, 53 farmers asked for advice regarding more than 90 problems (mostly referring to fungal and insect attacks). It was amazing to see long queues of farmers waiting to hear what the doctors had to say, and also interested in sharing their own ideas. This was an excellent training for us all, and we really "learned by doing".

...and scaling it up

Having participated in the training course, SECARD decided to try plant clinics on its own (with the technical assistance of GPC); two of them were set up in the Kathmandu area. World Vision started bi-weekly clinics in Lamjung, rotating them between Besishahar and Sundarbazar. These are going on right now, and the positive results are easy to see. GPC visited us again early this year, and talked to doctors and farmers, giving general recommendations on how to monitor our work and improve our impact. Keeping good registers is an important part of this approach.

A national workshop was organised in Kathmandu in May, with the specific purpose of introducing the plant clinic concept to a wider audience, sharing our results, and also discussing a way forward. The organisers made sure to invite the heads of the District Agriculture Development Offices of Kathmandu,

Bhaktapur, Lalitpur and Lamjung, as well as scientists from the Nepal Agriculture Research Council (NARC). We were happy with the interest they all showed and with the discussions we had. All participants agreed to help launch a broad plant clinic initiative. The plan is to incorporate the plant clinic concept into regular programmes and design a separate project for capacity building and networking. This is already on track. By joining the global network of plant clinics, I feel we are contributing to the development of an effective plant health system in Nepal.

Bed Prasad Khatiwada is currently providing technical advice to this initiative, and co-ordinating the work of various stakeholders, along with publications related to plant clinics. He is also member of the British Society for Plant Pathology (BSPP). E-mail: bedkhatiwada@gmail.com

Additional information can be found in the documents "Starting plant clinics in Nepal" by Eric Boa and Rob Harling, 2008, "Think big, start small: Developing a plant health system for Nepal" by Solveig Danielsen and Dannie Romey, 2009, and "Plant clinic initiatives in Nepal" by R.K. Adhikari (SECARD), published by DADO Kathmandu, SECARD and World Vision International Nepal.