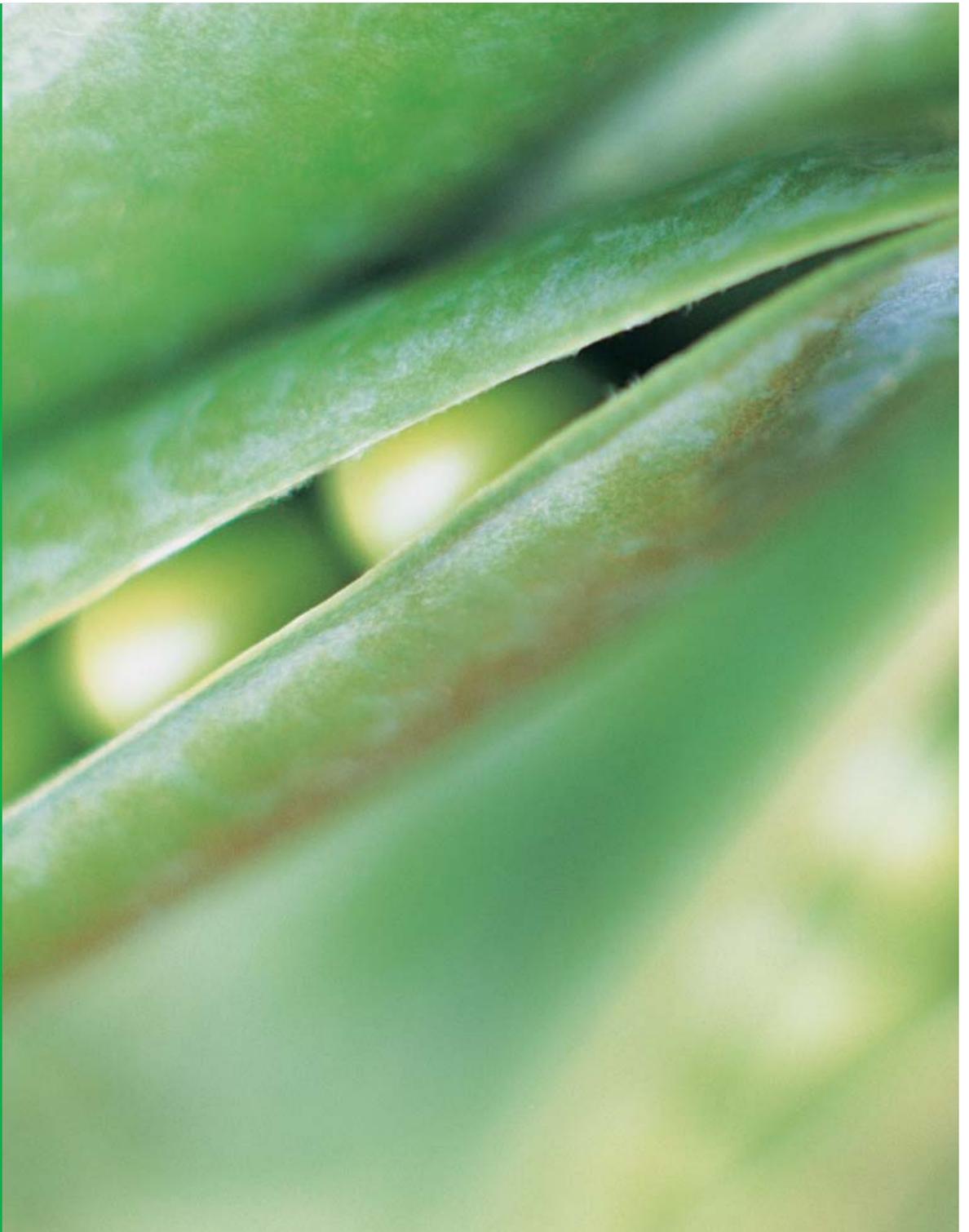


# NATIONAL INTEGRATED PEST MANAGEMENT (IPM) PROGRAMME IN NEPAL (NPL 2945)

A MID TERM REVIEW REPORT

BY BISHAL K. SITAULA, MAY-GURI SÆTHRE & HARI P. BHATTARAI

NORAGRIC REPORT NO. 31  
DEPARTMENT OF INTERNATIONAL ENVIRONMENT AND DEVELOPMENT STUDIES  
NORAGRIC



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Noragric Report No. 31  
May 2006

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**Norwegian University of Life Sciences**

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Sitaula, Bishal K., Sæthre, May-Guri & Hari P. Bhattarai, National Integrated Pest Management (IPM) Programme in Nepal (NPL 2945). A Mid-Term Review Report. Noragric Report No. 31 (May, 2006)  
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ISSN: 1502-8127

Photo credits: Digital Vision  
Cover design: Åslaug Borgan/UMB  
Printed at: Rotator, Ås

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Acknowledgements

## ACKNOWLEDGMENTS

The Mid Term Review (MTR) Team would like to express its appreciation to the Royal Norwegian Embassy for providing the opportunity to undertake the Mid Term Review of the National IPM Programme in Nepal. The Plant Protection Directorate under the Ministry of Agriculture and Cooperatives of His Majesty's Government of Nepal implements the programme. The UN Food and Agriculture Organisation provides technical support to the programme. The Royal Norwegian Embassy, PPD and the FAO officials in Kathmandu were always willing and available to assist the team in conceptualising the study framework and approach, by providing relevant documents/references, and also providing helpful insights about different issues and thematic areas that needed to be addressed in the evaluation. We are particularly thankful to Ms. Margaret Myklebust, Second Secretary, Royal Norwegian Embassy; Ms. Marit Strand, Second Secretary, Royal Norwegian Embassy, Mr. Kazuyuki Tsurumi, FAO Representative in Nepal; Mr. Lakshman K. Gautam, Assistant FAO Representative in Nepal; Dr. Binod Saha, National Programme Manager, National IPM Programme/FAO and Mr. Bhakta Raj Palikhe of the Pesticide Register, Plant Protection Directorate (PPD) for their substantive inputs, valuable discussions and help. The team received continuous guidance and excellent company from Dr. Binod Saha and Mr. Dhruva Raj Bhatta, Plant Protection Officer, PPD who accompanied the MTR Team during the field visit.

We gratefully acknowledge the valuable views and comments of Mr. Ganesh Kumar K.C., Secretary of MOAC and his colleagues at the Ministry at the beginning of the study and while debriefing the preliminary findings.

We are grateful to H.E. Prof. Ram Prasad Chaudhary of the National Planning Commission, Kathmandu for his beneficial comments, especially on the need for inter-sectoral cooperation to sustain the IPM Programme.

The MTR Team sincerely thanks all officials we contacted, not least DADOs and PPOs of the DAOs, who were ever ready to provide information and other assistance the Team needed. They did a remarkable job in arranging field visits and interaction with various stakeholders at district headquarters and site locations despite the uneasy security situation.

Above all, the MTR Team is indebted to the various programme beneficiaries – rural men and women, their respective organizations, local partner organizations and communities - for readily accepting to interact with us, often on very short notice. These interactions were of inestimable help to the MTR Team in assessing the relevance of the programme.

## ACRONYMS AND ABBREVIATIONS

APPO	Assistant Plant Protection Officer
ASC	Agricultural Service Centre
ADO	Agriculture Development Officer
CFUG	Community Forestry User Group
CBO	Community Based Organization
CSO	Civil Society Organization
DAG	Disadvantaged Group
DADO	Chief District Agriculture Development Office
DAO	District Agricultural Office
DDC	District Development Committee
DOA	Department of Agriculture
EU	European Union
FAO	Food and Agricultural Organization of the United Nations
FFS	Farmer Field Schools
F&S	Farmer & Science
Ha	Hectare
HMGN	His Majesty's Government of Nepal
IAAS	Institute of Agriculture and Animal Science
IGA	Income Generating Activity
IPM	Integrated Pest Management
IPM NCC	IPM National Coordination Committee
IPM RCC	IPM Regional Coordination Committee
IPM DCC	IPM District Coordination Committee
INGO	International Non-Governmental Organization
JT	Junior Technician
JTA	Junior Technical Assistance
KMTNC	King Mahendra Trust for Nature Conservation
LIBIRD	Local Initiatives for Biodiversity Research and Development
MDG	Millennium Development Goal
M&E	Monitoring and Evaluation
MOAC	Ministry of Agriculture and Cooperative
MTR	Mid Term Review
NARC	Nepal Agricultural Research Council
NFE	Non-formal Education
NGO	Non-Governmental Organization
NTFP	Non-Timber Forest Product
O&M	Operation and Maintenance
OP	Operational Plan
PD	Programme Director
PM	Programme Manager
PPD	Plant Protection Directorate
PPO	Plant Protection Officer
PRSP	Poverty Reduction Strategy Paper
RAD	Regional Agriculture Directorate
RPPL	Regional Plant Protection Laboratory
SMS	Subject Matter Specialist
TCP	Technical Cooperation Programme
TCDF	Tharu Community Development Forum
VDC	Village Development Committee

## **1. EXECUTIVE SUMMARY**

The main purpose of this Mid Term Review (MTR) is to assess the progress of the National Integrated Pest Management (IPM) Programme (NPL 2945) in relation to its planned outputs, and to analyse constraints and achievements in programme implementation in order to provide guidance to both the funding agent (Norwegian Government) and the implementing agent (FAO and HMG Nepal) for possible amendments or rectifications that may be needed for the remainder of the programme period. As indicated in the Terms of Reference (ToR), assessment of the progress of the programme towards fulfilling its two main objectives has been emphasised during the review process. The objectives stated in the programme document are:

(1) To contribute to institutionalise a sustainable national Integrated Pest Management Programme (IPM) by strengthening the capacity of the Plant Protection Directorate (PPD), collaborating national, regional and district level training and extension institutions in the governmental and non-governmental sector strengthened to integrate IPM training and support programmes for smallholder farmers; and

(2) To empower farmers to increase production and productivity efficiently while protecting environment, conserving the bio-diversity and avoiding health hazards for betterment of their livelihood.

Based on information collected through individual discussions, key-contact interviews, group discussions and direct field observations with 13 IPM Farmers Field School (FFS) and 2 Farmers & Science groups as well as the review of supplied reports and documents, the MTR Team has come up with the following principle findings and recommendations.

[Please refer to Annex 1 for our specific remarks on the activities and outputs of the programme.]

### **1.1. PRINCIPLE FINDINGS AND CONCLUSIONS**

The MTR Team found that the overall goal or development objective of the programme to reduce poverty and increase food security while protecting the environment is in line with the MDGs, the five WEHAB initiatives, as well as with Nepal's official strategy papers (PRSP and the APP).

The two main objectives (1. and 2., above) correspond well to the needs of Nepal, and they remain valid for the remainder of the programme period (2006-2007).

However, the MTR Team concludes that the two objectives will only be partly achieved within the frame and lifetime of this programme. In particular, Objective 1 has not been given enough attention so far although it is of overall importance for the achievement of Objective 2. Fulfilment of Objective 1 is also a necessity for sustainability of the IPM Programme's activities.

The programme has a clear linkage and follow-up with past regional IPM projects in Asia and Nepal, and is conducted in close interaction with the primary beneficiaries. Although there is

no baseline study to measure its impact against, the MTR Team found clear indications that the programme has catalysed significant changes in pest management thinking and practices among participating farming communities.

The use of the IPM-FFS approach has shown that even in the present situation of conflict, such community need-based agricultural development activities can be implemented with minimal disturbance.

The monitoring and evaluation aspect of the programme appears weak even though the programme document states that the IPM Coordination Committees, at different levels, will ensure monitoring and evaluation (along with coordinated planning and implementation). These committees lack incentives and resources to mobilise personnel for monitoring and evaluating the activities of the FFS and to provide technical support and assistance for organising farmers' groups as viable institutions. Interaction of the MTR Team with coordination committee members indicated that the higher government authority has not given clear mandates and resources to these committees for discharging their responsibilities.

The inception report emphasizes that there should be mechanisms in place to ensure that social inclusion, and gender sensitivity are assured in the activities of the programme. Both field visits and programme documents suggest that neither social nor gender discrimination is a problem at the grass-root level. However, some remote parts of Nepal may require a gender/cultural sensitive pro-active approach to be taken. Also, at JT/JTA/PPO/DADO/PPD levels a gender sensitive approach is recommended to encourage and recruit female participation at these levels in the future.

The amount of activities and geographical spread of the programme is impressive compared to the minimal staff associated with the programme at the central level. Many of the shortcomings mentioned in this report should be seen as a result of over-ambitious objectives compared to the financial and human resources available to the programme, as well as its limited timeframe.

The programme's IPM activities are still insignificant compared to the farming population and the diversity and complexity of crop and location-specific pest problems in the country. For this reason, continued financial and technical support is needed for sometime beyond this programme cycle to ensure that positive gains are maintained at all levels, and to institutionalise and ensure sustainability of IPM in Nepal. Hence our recommendations are not only for the present programme cycle ending in 2007 but also for a possible subsequent phase.

## **1.2. RECOMMENDATIONS**

### **General**

Although the primary beneficiaries of the programme under review are poor farmers, they will remain isolated and helpless when the programme ends unless a national support system is established. This should consist of well-trained government service staff and managers, as well as informed politicians who all contribute to create an enabling environment that encourages farming communities to adapt to a biological/ecological- based pest management paradigm.

Objective 1 should be given more attention in the remainder of the programme to ensure further progress in institutionalising the programme within the national development agenda (government level), the national research agenda (multidisciplinary IPM research teams consisting of professionals from both plant protection and social sciences), the national agricultural extension agenda and the NGOs.

This will help to prepare the ground for an exit strategy, which also needs to be given considerable attention in the remaining period (2006-2007).

### **Specific**

We recommend revision of the programme's implementation strategies in order to get the coordination committees (IPM DCC, IPM RCC) more involved in monitoring and evaluation (M&E), follow-up of the FFS established by the programme (even after its termination), and extending similar activities to new communities.

The programme should be revised to include M&E as a strong component. At present very little funding has been allocated for monitoring and evaluation activities, including self-evaluation. The team recommends that a serious effort be made to procure funds for this crucial activity, if not from the present programme funds, then from other sources such as core funds from the government. There is a need to prepare an evaluation and monitoring plan with clear guidelines on the data required, data sources, data collection methods, data collection frequency, all according to each of the verifiable indicators under the final goal and intermediate objectives. The plan should assign and designate the people responsible for the different tasks.

The programme's goal of empowering farmers on a sustained basis requires that increased economic benefits to farmer after completion of FFS be realised. We recommend that an obligatory commitment by farmers to grow crops on a portion of their land for commercial purposes should be sought at the completion of FFS sessions.

Frequent transfers of PPO/DADO and other active staff (JT, JTA) involved in the programme have created delays in the running of planned activities in some districts. We recommend that MOAC take this problem seriously and avoid as much as possible the transfer of staff involved in IPM Programme.

Establishing a separate IPM unit with adequate human resources should enhance the capacity of PPD. Considering the workload of the current IPM Programme team at PPD, one additional professional is urgently needed to develop the necessary instruction manuals, guidebooks and do-it-yourself kits for PPD, DADO and farmers' associations to follow for effective implementation of IPM Programme activities.

For improved outcome and sustainability of the programme, we recommend the initiation of a number of steps. They include:

- Incorporation of the IPM Programme activities as core (regular) activities of district and sub-district level agriculture offices

- Collaborate with relevant national (e.g. NARC) and international research institutions and universities to better address emerging pest problems and those already encountered by farmers.

- Through collaboration and linkages, assure that IPM, FFS, Farmer and Science are included in the course curriculum in relevant universities' education programmes.

The Programme should be linked with Regional FAO IPM projects and other relevant IPM projects/facilities for sharing of experiences and to exchange knowledge, expertise and skills.

Collaborate with local schools and invite students to observe IPM-FFS activities on field days. CARE Nepal is already a step forward in this direction, and we recommend that the IPM Programme closely collaborate with CARE Nepal for this purpose.

Efforts to transfer agricultural technologies to farmers are more effective when the GO, NGOs and private sector work in partnership. NGOs are particularly effective in reaching resource poor farmers while GOs usually have greater technical capacity. Effective partnership between organisations will enhance wider participation of farmers on FFS.

The team noted that there is great potential for further strengthening the local level professional capacity by including the numerous existing JTs/JTAs at the district level in the IPM training.

The curricula in all crops covered by FFS should be broadened by addressing disease, nematode (and weed) problems, and to include a diversity of IPM strategies and tools (in particular, pay more attention to biological control agents and conservation of natural enemies).

The curricula should be strengthened by addressing food safety issues and pesticide residues in the context and requirements of global trade (WTO-SPS-Agreement).

The FFS should be carried out as a one-year-cropping cycle for participating farmers. This would greatly enhance the efficiency of IPM (eco-system stability) and increase the farmers understanding and adoption of IPM as a continuous year-round practice.

It is time to address late blight disease in tomatoes and potatoes and make the appropriate links to relevant research institutions.

Development of a curricula for IPM in tea should not be further delayed, in light of the high pesticide use as well as the importance of the tea trade.

IPM in apple and other fruit crops is indeed very much needed (possible export), and links to relevant research institutions to address the many pest problems should be made during 2006.

In order to enhance the effectiveness of delivery, a culturally grounded/sensitive approach should be sought and adopted gradually. Appropriate tools (use of local language) according to the cultural/ethnic reality should be selected. This may include special targeted programmes for illiterate farmers and those having language barriers. It may include training of facilitators from targeted ethnic groups to enhance communication, and if possible, training materials should be translated into the ethnic languages.

The MTR Team finds that the two main objectives are only partly achievable in the lifetime of this programme. We would like to emphasize that this statement should not be seen as criticism of how the programme has been managed so far, but we encourage the management to develop a proposal for a second phase in which institutionalising at different levels gets more attention.

In a second phase of the programme, the government should contribute more to the process of institutionalising IPM. Also research institutions should be involved and encourage seeking additional funding for crop and location specific multidisciplinary IPM research in close collaboration with the PPD, DADOs and farming communities.