

**UNEP/GEF PDF-B
EP/GLO/301/GEF**

**"Conservation and Management of Pollinators for Sustainable
Agriculture, Through an Ecosystem Approach"**

**Final Report of the
Second International Steering Committee (ISC) Meeting**

FAO Headquarters, Rome, Italy

13-16 December 2004

**Food and Agriculture Organization of the United Nations
December 2004**

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1. Introduction

The PDF-B project on the “Conservation and Management of Pollinators for Sustainable Agriculture, Through an Ecosystem Approach”, approved for funding by the Global Environment Facility (GEF), began implementation on 1 April 2004 and will have a duration of 24 months. The project is implemented by the United Nations Environment Programme (UNEP) and executed by the Food and Agriculture Organization of the United Nations (FAO).

The International Steering Committee (ISC) held its second meeting in Rome at FAO Headquarters from 13-16 December, 2004. Members of the ISC participating at this second meeting are listed in Annex 1 (List of Participants). Pakistan was not represented at the meeting.

A CD-Rom containing all technical information provided by partners during the PDF-B phase to date, was compiled and distributed at the meeting.

The main objectives of the meeting were to:

1. Present stocktaking results at national, regional and international levels (including preliminary IT findings)
2. Develop baseline scenario with costs
3. Develop alternative scenarios
4. Agree on criteria for demonstration sites
5. Discuss funding strategy for the Full-sized Project

During the meeting, another objective was suggested:

6. Understand Monitoring and Evaluation.

The overlying concept of collaboration was stressed.

The main outputs of the meeting were the:

1. Agreement on baseline scenario for Full-sized Project
2. Agreement on preliminary activities for the Full-sized Project
3. Agreement on criteria for demonstration sites

The meeting was opened by Linda COLLETTE (Senior Officer (Crop and Crop Associated Biodiversity), FAO Plant Production and Protection Division, Agriculture Department), who gave a brief overview of the project and meeting objectives, but also a brief overview of GEF’s priorities and strategies based on the November 2004 GEF Council meeting. She stressed GEF priorities for monitoring and evaluation, country endorsement, co-funding, long-term sustainability, elaboration of risk management in risk-prone areas and community participation.

All participants then introduced themselves, as there were some new members of the ISC (Nepal and India), as well as FAO Staff.

The agenda of the Second ISC meeting was presented by the Facilitator (Rainer KRELL, FAO), and adopted by the members of the ISC (Annex 2).

To place the discussions of the meeting in the context of the development of the Full-size Project (FSP), Linda COLLETTE gave a review of the Problem Analysis and Project Planning Matrix (Log Frame). Marieta SAKALIAN (UNEP/GEF) reviewed and clarified the concepts of baseline and incremental costs, and alternative scenario.

2. Presentations – Stocktaking and Needs Assessment, and Baseline Scenario

In order to have a common understanding of the project, Linda COLLETTE presented the objectives and components of the Full-size Project, and of the PDF-B Phase. Country partners presented the results of their PDF-B implementation to date, in particular the results of the stocktaking exercise:

- i. Knowledge base
- ii. Best management practices
- iii. Capacity building and awareness raising
- iv. Sharing experiences and dissemination of results

These were followed by discussion and sharing of experiences.

Further presentations were given on the global dimension of the project: (i) on information technology, by Arthur CHAPMAN (International consultant, Information Technology); and (ii) on the global components of the project, by Barbara GEMMILL (HERREN) (Global Project Coordinator). Selected case studies received, globally, for the preliminary State of the World's Pollinators were presented.

Partners agreed to send information regarding IT issues (e.g. what partners are looking for in IT solutions) to Arthur CHAPMAN by **December 23, 2004**.

3. Development of Full-size Project Activities

All participants developed a preliminary list of activities for the Full-size Project (FSP) for all four components. Discussions for the second and third component were carried out in two groups, who then reconvened to discuss the preliminary list of activities. Local and global potential impact was also discussed. The preliminary list of activities for all four components were compiled and distributed to partners, who were requested fill out the sections on which activities pertain to their country specificity, and the relative weight.

Component 3 was revised to be called "Capacity building", and Component 4 was recognised to need a stronger focus on mainstreaming, and hence is provisionally called "Sharing of experiences and dissemination of information, awareness and mainstreaming".

The preliminary list (by component) is in Annex 3 and will be refined and reorganised by FAO, and sent to partners.

4. Criteria for demonstration sites

The criteria for demonstration site selection were discussed and agreed upon. The final list is in Annex 4. During discussions, the scope of the project was discussed, referring to crop systems and the surrounding environment relevant to pollinators. It was agreed that the focus of the demonstration sites be on crops, which are defined as horticultural, field, orchard, cultivated fruit and tree crops.

5. FSP preparation

Marieta SAKALIAN (UNEP/GEF) presented UNEP/GEF requirements for the FSP. These included implementation and management structures at national and global levels, stakeholder participation plan, budget requirements and monitoring and evaluation plan. Examples were provided.

6. Funding strategy

The development of a funding strategy was discussed, based on a draft document provided to partners, and finalized (Annex 5). Discussions were focused on the difference between gathering information on co-funders and their activities, and securing co-funding.

7. Review of PDF-B work plan and timetable

The work plan and timetable for the PDF-B was reviewed in detail. A “to do” list for countries, and for FAO (global dimension), was prepared, and new deadlines were agreed upon. These can be found in Annex 6.

8. Third International Steering Committee (ISC) meeting

The third meeting of the ISC will be held at FAO Headquarters in Rome, Italy in May, 2005.

At the third ISC meeting, suggested topics to be covered will be:

- Indicators
- FSP draft
 - Co-funding
 - Strategies
 - IT component
 - Global aspects (e.g. crop selection, systems, exchange, coordination)

It was also suggested that the necessity of the scheduled fourth meeting of the ISC be decided at a later date, or, as appropriate, be used as a donors meeting.

9. Other matters

A CD-Rom was distributed at the end of the second ISC meeting, containing information discussed at the meeting.

The final report was approved by all present members at the second ISC meeting.

ANNEXES

Annex 1

CONSERVATION AND MANAGEMENT OF POLLINATORS FOR SUSTAINABLE AGRICULTURE, THROUGH AN ECOSYSTEM APPROACH
2nd INTERNATIONAL STEERING COMMITTEE MEETING
FAO, ROME, 13 – 16 DECEMBER 2004
FINAL LIST OF PARTICIPANTS

PARTICIPANTS			INSTITUTION	POSTAL ADDRESS	EMAIL/ WEBSITE	CONTACT DETAILS
COUNTRY	NAME	JOB TITLE				
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COUNTRY	NAME	JOB TITLE				
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F A O						
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PARTICIPANTS			INSTITUTION	POSTAL ADDRESS	EMAIL/ WEBSITE	CONTACT DETAILS
COUNTRY	NAME	JOB TITLE				
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Annex 2

AGENDA

**UNEP/GEF PDF B Project on:
“Conservation and Management of Pollinators for Sustainable Agriculture,
Through an Ecosystem Approach”**

**SECOND INTERNATIONAL STEERING COMMITTEE MEETING
Canada Room
Building A - Room 356/7**

**FAO, ROME, ITALY
13-16 DECEMBER, 2004**

Objectives:

7. Present stocktaking results at national, regional and international levels (including preliminary IT findings)
8. Develop baseline scenario with costs
9. Develop alternative scenarios
10. Agree on criteria for demonstration sites
11. Discuss funding strategy for the Full-sized Project

Outputs:

4. Agreement on baseline scenario for Full-sized Project
5. Agreement on alternative scenario for the Full-sized Project
6. Agreement on criteria for demonstration sites

PART I: INTRODUCTION AND BASELINE SCENARIOS

MONDAY 13 DECEMBER, 2004

Morning Session: 9:00 – 12:30

(Break 10:00-10:30)

- Welcome (*L. Collette*)
- Introduction of participants
- Meeting objectives (*L. Collette*)
- Presentation and adoption of agenda (*R. Krell*)

- Review Log Frame (*L. Collette*)
- Concepts of baseline and incremental costs (*M. Sakalian*)

- Presentation of PDF-B implementation status – Stocktaking and Needs Assessment Exercise and Baseline Scenarios (*B. Herren*)

Stocktaking Report

- i. Knowledge base
- ii. Best management practices
- iii. Capacity building and awareness raising
- iv. Sharing experiences and dissemination of results

Africa

- Ghana (*P. Kwabong*)
- Kenya (*W. Kinuthia*)
- South Africa (*C. Eardley*)

Asia

- India (*U. Dhar*)
- Nepal (*A. Jha*)
- Pakistan (*A. Qayyum*)

Brazil (*B.Ferreira de Souza Dias*)

Global

- Information management (including IT study) (*A. Chapman*)
- Global components (*B. Herren/L. Collette*)

12:30-14:00

Lunch

Afternoon Session 14:00 – 17:00

(Break 15:00-15:30)

- ...cont'd (presentation of PDF-B implementation status)

- Discussion on experiences and challenges

PART II: DEVELOPMENT OF FULL-SIZE PROJECT ACTIVITIES

TUESDAY 14 DECEMBER, 2004

Morning Session: 9:00 – 12:00

(Break 10:00-10:30)

- **Development of alternative scenario, by component of the FSP:**
 - Development of a Knowledge Base (*Introduction: B. Herren, followed by discussion*)
 - resources needed, primary beneficiaries, and appropriate level of coordination:
 - national
 - regional
 - international
 - Extension and Promotion of Pollinator-friendly Best Management Practices (*Introduction: B. Herren, followed by discussion*)
 - resources needed, primary beneficiaries, and appropriate level of coordination:
 - national
 - regional
 - international

12:00-13:30

Lunch

Afternoon Session 13:30 – 18:00

(Break 15:00-15:30)

- Capacity Building and Awareness Raising (*Introduction: B. Herren, followed by discussion*)
- - discuss needs assessments of awareness raising and capacity building strategies
 - resources needed, primary beneficiaries, and appropriate level of coordination:
 - national
 - regional
 - international
- Sharing of Experiences and Dissemination of Results (*Introduction: B. Herren, followed by discussion*)
 - including resources needed, primary beneficiaries, and appropriate level of coordination:
 - national
 - regional
 - international

WEDNESDAY, DECEMBER 15, 2004

Morning Session: 9:00 – 13:00

(Break 10:00-10:30)

- ...cont'd (Development of alternative scenario, by component of the FSP)

13:00-14:30

Lunch

Afternoon Session 14:30 – 17:00 -
(Break 15:00-15:30)

PART III: STRATEGIES AND PLANS

- Discuss and finalize criteria for demonstration sites (*L. Collette and partner countries*)
- Co-funding strategy and Financial Plan (*L. Collette/B. Herren*)
- Project replication strategy (*M. Sakalian*)
- Implementation strategy and structures for Full-sized Project (*M. Sakalian*)
 - Implementation structures at national and global levels
 - Stakeholder participation plan
 - Financial Plan
 - Monitoring and Evaluation Plan

Evening “Homework”: To return the following morning with the proposed alternative scenario activities in each country placed within the **Summary Incremental Costs Matrix**, (column 3) including estimated costs.

PART IV: REVIEW OF PDF-B WORK PLAN AND TIMETABLE

THURSDAY, DECEMBER 16, 2004

Morning Session: 9:00 – 12:30
(Break 10:00-10:30)

- PDF-B workplan (*L. Collette*)
- PDF-B timetable (*L. Collette*)
- Stakeholder communication (*B. Herren/L. Collette*)

12:30-14:00 *Lunch*

Afternoon Session 14:00 – 17:00
(Break 15:00-15:30)

- Other items (*L. Collette/B. Herren*)
 - Reporting (technical and financial)
 - Third ISC meeting
- Review of draft 2nd ISC Final Report (*N. Azzu*)
- Adopt 2nd ISC Final Report (*All participants*)
- **Wrap-up**

Annex 3

COMPONENT I – DEVELOPMENT OF A KNOWLEDGE BASE

	Potential Impact		Needed (y/n)	Weight (%)	Notes
	Local	Global			
<i>1.1. Update literature review and analysis</i>					
Cluster 1 - Compilation	x				
Collect copies of articles					
Compile thesis and reports					
Review literature on indigenous knowledge and practices					
Case studies included in literature compilation					
Survey of abstracts					
Collecting grey literature					
Cluster 2 - Reviews	x	x			
Pollinators in different agro-ecosystems					
Pollinators of major crops of agro-ecosystems					
Agro-ecosystem approach					
Cropping system approach					
Pollinator decline					
Implication of change land use – land use change-population dynamics					
Cluster 3 - Access	x	x			
Common platform for literature bases and searchable existing literature					
Easy access through PDF or CD's					
Enhance access to existing literature					
Digitalizing grey literature					
Promote pollination information in tertiary institutions/Disseminate literature on pollinators to institutions					
Information to be made available					
Cluster 4 – Published	x	x			
Information to be published					
<i>1.2 Refine methods for the different surveys at country level</i>					
Cluster 1 – Survey Design	x	x			
Harmonize pollinator surveys					
Develop survey methodologies					
Adaptive global assessment methodologies on declines tested, replicated					
Test them and go ahead					
Define approaches and methodologies					
Define and implement experimental designs to measure causes of decline					

Standardize equipment					
Collaborations developed/reinforced with other continental assessments for harmonization and sharing					
Cluster 2- Documenting	x	x			
Document procedures					
Publish manuals on standard methods					
1.3 Document existing traditional knowledge and practices					
Cluster 1 – Rules	x				
Define and apply rules to collect and disseminate knowledge, to protect rights					
Cluster 2 – Gather	x				
Gathering information - Identification of traditional knowledge pertaining to pollination					
Cluster 3 - Document	X (if rules adequate)	X (if rules adequate)			
Farmers' traditional knowledge and practises documented to focus group discussion					
Document traditional knowledge on pollination					
1.4 Assess plant pollination needs					
Cluster 1 – Selection	x				
Chose priority crops					
Identify crops most dependent on pollinators					
Cluster 2 – Assessment	x	x			
Assess crop benefits from pollination					
Assess pollination needs and availability of major crops and other plants of economic importance					
Study plant-pollinator benefits					
Pollen deposit sufficiency methods developed/used (crop perspective)					
1.5 Assess socio-economic value of pollination (field work)					
Cluster 1 – Methodology	x	x			
Develop robust framework of valuation of pollination as ecosystem service					
Harmonize economic valuation methods					
Use redundant methods					
Through community participation					
Cluster 2 – Assessment	x	x			
Assess the actual and potential economic value of pollination to crops					
Economic evaluation of pollinators					
Assess non-commercial (subsistence) crop value					
Assess non-honeybee contribution					
Social/cultural evaluation of pollinators					

Identify pollinator conserving communities and document this information					
Cluster 3 – Awareness	x	x			
Pollination as input of production (awareness)					
1.6 Survey public awareness (field work)					
Cluster 1 - Tools		x			
Develop tools to assess public awareness					
Cluster 2 – Surveys	x				
Survey awareness of farmers, extensionists, conservationists, consumers, policy makers					
Schools					
Assess the level of awareness					
Survey awareness among stakeholders					
Relevant private sector					
Cluster 3 – Analysis of surveys	x	x			
Develop understanding about the positive or negative attitudes towards pollinators					
Attitudes of farmers on pollinators’ role studied					
Study attitude of extension workers on the role of pollinators					
Attitude of national and international policy makers					
1.7 Develop manuals and tools for pollinator identification, pollinator landscape management, and information presentation					
Cluster 1 – Training manuals	x	x (if translated)			
Manuals for farmer training					
Manual for extension workers training (all aspects)					
Cluster 2 – Identification tools	x	x			
Identify lucid keys – user friendly					
Identification manual					
Develop user-friendly keys					
Pictorial manuals for farmers					
Cluster 3 – Management decision	x	x			
Develop or adapt decision support tools for farmers and landscape planners and managers					
Tools developed for pollinator landscape management					
Cluster 4 – Participatory tools	x	x			
Tools on participatory action research					
Cluster 5 - Translation	x	x			
Pollinator-specific multi-lingual vocabulary software leading to prompt translations					
Local language translation of manuals					
Cluster 6 – Interfaces	x	x			

Interfaces with existing databases (discovery tools)					
1.8 Organise and update databases					
Cluster 1 – Contents	x	x			
Collect data on experts and facilities					
Nesting sites					
Bee-keeping					
Diversity					
Databases on crop pollination needs, effective pollinators, pollinator surveys, value of pollination, awareness of pollination, etc					
Cluster 2 – Tools		x			
Effective interaction database (plant-pollinator-agro-ecosystem) developed, made available					
Pollinator databases harmonised/interoperability					
Clean data					
Clean interface-query systems					
1.9 Assess pollinator effectiveness and availability					
Cluster 1 – Identification	x	½			
Identify effective pollinators for major crops and other plants of economic importance					
Identification of major pollinators					
Determine pollinators from floral visitors					
Identify pollinators					
Cluster 2 – Causes for pollinator decline	x	x (if ?)			
Inter-specific competition: native-introduced					
Land use change impact on population dynamics					
Cluster 3 - Assess	x	x (if?)			
Assess service of pollinators					
Monitor pollinator populations					
1.10 Survey and “gap-filling” in pollinator biology and ecology					
Cluster 1 – Targeted research	x	x			
Identify alternate foraging resources					
Study conservation biology of pollinators					
Pollinator distribution					
Pollinator nesting biology					
Systematically compile plant-pollinator-ecosystem interactions					
Pollinator dispersal/plant gene flow					
Engage universities (students) to carry out extensive research on pollinator biology and ecology					
Fill in information gaps on biology and					

ecology of effective pollinators of selected crops					
<i>1.11 Analysis of effectiveness of enabling environment</i>					
Cluster 1 – Analysis of instruments	x	x			
Analysis of policy instruments that are pollinator-friendly and those that are not					
Document and analyse pollinator friendly policies and legislation					
Review success/failures of mainstreaming in policy					
Analyse legislations, policies, economic instruments, markets, certifications					
<i>1.12 assess interaction between agro-ecosystems and pollination management</i>					
Cluster 1 – Analysis of interactions between agro-ecosystems and pollination management	x	x			
Characterise threats/benefits of all different agro-ecosystems to pollinators					
Analyse quality of interaction					
Assess target food crops and wild related species in relation to pollination					
Analyse contribution of natural ecosystems					
Consider impact of spatial and temporal features of agro-ecosystem structure and practices on pollinators					

COMPONENT 2 – EXTENSION AND PROMOTION OF POLLINATOR-FRIENDLY MANAGEMENT PRACTICES

	Potential Impact		Needed (y/n)	Weight (%)	Notes
	Local	Global			
2.1 Identify and assess best management practices (BMP)					
Cluster 1 - Document		x			
Inventory of practices that can be applied to pollinator conservation					
Document BMP and share them					
Identify IPM implications on pollinators					
Identify existing local practices					
Reduced pesticide use					
Determine the IK that supports best practices					
Include in inventory practices to manage pollinators at a landscape level					
Practice must conserve pollinator diversity					
Take inventory of sacred groves (forest islands)					
Cluster 2 - Analysis		x			
Carry out consultations with farmers, extensionists to identify BMP					
Identify indicators of BMP					
Identify, test to develop BMP					
The following ("old" 2.4) has been integrated into 2.1.....					
2.4 Document best management practices (economic aspects highlighted)					
Cluster 1 – Document		x			
Document socio-economic aspects of BMP					
Document the impact of sacred groves on pollinators and crop production					
Document BMP of high economic value					
Document food security					
Document impacts, practices and costs to farmers to implement					
Cluster 2 – Assess		x			
Assess replication in similar settings					
Assess effect on environment					
Assess economic aspects					
2.2 Develop management practices through demonstration sites					
Cluster 1 – Setting up sites	x				
Demo site representative					
Establish demo sites to show the impact					
Demonstration at prevalent cropping					

system					
Establish flower gardens					
Select sites representing agro-ecosystem					
Create community reserves					
Set up IK demo sites for best practices					
Cluster 2- Develop practices		x			
Develop/test specific recommendations for forage, nesting, water needs of pollinators in demo sites					
Participatory approach					
Refine through participation					
Develop management practices for major pollinator dependent crops in all the regions					
Augment food base for pollinators					
2.3 Evaluate best management practices					
Cluster 1 – Tools		x			
Develop participatory methodology of evaluation					
Develop approaches for evaluation					
Tools to evaluate effective management practices					
Cluster 2 – Doing	x				
Determine best practices to show-case economic benefits					
Monitor the effect of community reserves					
Evaluate BMP on farmer fields					
Carry out evaluation involving farmers, researchers and development professionals					
Test if it conserves pollinator diversity					
Evaluate other on-farm best practices					
Evaluate effectiveness of specific recommendations/practices to provide forage, nesting and water needs of pollinators on farm					
2.4 Document best management practices (economic aspects highlighted)					
Cluster 1 – Document		x			
Document socio-economic aspects of BMP					
Document the impact of sacred groves on pollinators and crop production					
Document BMP of high economic value					
Document food security					
Document impacts, practices and costs to farmers to implement					
Cluster 2 – Assess		x			

Assess replication in similar settings					
Assess effect on environment					
Assess economic aspects					
2.5 Produce management plans and manuals					
Cluster 1 – Content		x			
Manual depicting the process, including landscape level management - from demo sites					
Manuals design for specific user					
Develop manual for farmer-based NGO's					
Produce manuals for farmers, development practitioner based on management plans					
Develop clear manuals for farmers, extension agents and policy makers					
Cluster 2 – Procedure (deliver)		x			
Produce management plans through participation					
Develop local BM Plans and manuals					
Develop and produce crop based management plans and pollinator based management plans					
2.6 Propose and establish pollinator friendly policies and incentives (including voluntary certification)					
Move to Component 4...					
Cluster 1 - Consult	x				
Carry out conservation to promote pollinator-friendly policies					
Cluster 2 – Scope		x			
Policies which promote best practices and incentives					
Propose incentives for farmers having pollinator-friendly agriculture					
Standardized organic farming					
Promote nesting places for pollinators					
Project successes at all levels					
Promote use of bee-keeping for pollination of crops					
Promote habitat management practices to enhance pollinators					
Cluster 3 – Review and dissemination		x			
Review (local and global) and recommend					
Educate and propose to policy makers pollinator friendly practices					
Encourage promotion of pollinator-friendly policies					
2.7 Conduct field days on demonstration sites					
Cluster 1 – Scope	x				
FFS on demo sites					

Facilitate stakeholders interaction on demo sites					
Arrange visits of stakeholders and partners					
Conduct field days on farmer fields and demo sites					
In-service training of extension agents on demo sites					
Demo sites must be accessible					
2.8 Disseminate information on best management practices and success					
Cluster 1 – Scope	x				
Case study					
Cluster 2 – Disseminate		x			
Production of tools such as video documentation					
Identify demo tools for the promotion of BMP					
Disseminate success stories to print electronically					
Electronic and printed material of successes					
Environmental greening/Learning centres/pollination clubs					

COMPONENT 3 – CAPACITY BUILDING

	Potential Impact		Needed (y/n)	Weight (%)	Notes
	Local	Global			
3.1 Carry on-going needs assessment					
Cluster 1 - Needs assessed					
Carry out need assessment at all levels					
Prioritize needs assessments					
Document needs of farmers and other stakeholders					
Assess KAP gap					
Evaluate education needs in schools PISIT..college, extension, taxonomic and para-taxonomic					
Cluster 2 ????? - Testing					
Pre-test materials					
3.2 Review existing material					
Cluster 1 – Review needs					
Review need periodically					
Global review/inventory of secondary, tertiary, extensionists material					
3.3 Adapt existing material					
Cluster 1 – Testing					

Pre-test materials					
Cluster 2 – Adapt existing material					
List existing CB materials					
See if material suit needs					
Adopt best published materials and distribute them					
Utilize existing material for CB					
Make applicable to user					
Make use of existing material					
Revise know-how with IK base					
3.4 Develop training material for target clients (institutional: collections for museums, equipment for trainers, libraries)					
Cluster 1 – Develop material					
Develop training modules for teachers, students, NGOs and other stakeholders					
Develop training materials for clients					
Student/student club modules, training materials					
Teacher training modules and materials					
Assess and develop training material needs of target groups					
Develop training aids					
Pictorial identification kits					
Develop training materials and tools for public					
3.5 Provide training e.g. Farmer Field Schools (FFS) (farmers, extensionists, policy makers, formal training schools and universities, NGOs, journalists, exchange)					
Cluster 1 – Training courses					
Taxonomy courses					
Support in MS PhD research					
Para-taxonomy/basic taxonomy training for farmers and extension agents (e.g. African Bee Course)					
Taxonomic training for technicians and high-level man power (universities)					
Plan and organise short-term courses for farmers					
Provide targeted training for specific stakeholders					
Suitable study outline for basic to higher level education					
Crop ecology (season based)					
Plan various training strategies for target people					
Train extensionists and students on identification of pollinators					

Train extensionists on pollination service and pollinator management					
Train undergraduate and graduate students on pollination service and pollinator management					
Facilitate stakeholders knowledge base through training and exposure					
Strengthen local capacity					
Short course for farmers/workshop and seminars					
Emphasis on insect ecology					
Organize refresher courses for teachers on pollinators					
Cluster 2 – Participatory training					
Adopt participatory training techniques					
Make training programme for practical and valuable					
Stakeholders interaction at training site (field days)					
Carry out training at community and other levels					
3.6 Make materials available and advertise training					
Cluster 1 - Advertise training					
Carry out campaigns for training by using advertisement tools					
Make training material available for audiences free of cost					
Publicise training materials and training programmes					
3.7 Evaluate training outcome					
Cluster 1 – Evaluation					
Evaluate training outputs based on application of training expectations					
Test training results on farmer fields					
Assess knowledge gained					
Monitor knowledge practices					
Evaluate effectiveness of training					
Cluster 2 – Other means of capacity building					
Field days					

COMPONENT 4 – SHARING OF EXPERIENCES AND DISSEMINATION OF INFORMATION, AWARENESS AND POLICY (“MAINSTREAMING”)

	Potential Impact		Needed (y/n)	Weight (%)	Notes
	Local	Global			
4.1 Awareness					
Cluster 1 - Strategy	x	x			
Develop means of involving the public in the process (i.e reports to the public on demonstration sites					

Develop <i>positive</i> message of pollination services – with global, regional and national dissemination					
Strategy for public awareness per target group					
Design methods to evaluate effectiveness of campaigns					
Check for effectiveness of awareness raising strategies					
Develop effective public awareness campaign					
Cluster 2 – Surveys	x				
Agree on updating of survey plans					
Carry out product surveys on the awareness level in the largest areas					
Evaluate farmer understanding of economic benefits to themselves and community					
Evaluate public understanding of pollination					
Monitor and record awareness on timescale					
Evaluate para-taxonomic improvement at local level (farmer extension officers)					
Cluster 3 – Developing Tools	x	x			
Interest media people in pollination issues					
Use of car stickers, billboards, posters and postcards					
Animation films					
E-groups, e-newsletter					
Farmers fair – pollinator focus					
Travelling picture shows					
Floral calendar					
Develop awareness materials for local use					
List current awareness raising strategies by radio, TV, mobile vans, Arbor days, quiz programmes, youth groups, community groups					
Review current awareness training materials					
Documentation of Information Communication Technology strategies					
Cluster 4 – Promotion	x	1/2			
Promote awareness of extensionists					
Promote awareness of farmers and bee-keepers					
Promote awareness of conservationists					
Include pollinators activity into conservation clubs					
Include pollinators activity into conservation campaigns					
Participatory record-keeping (floral calendar)					
4.2 Policy Development, Policy Dissemination,					

<i>Policy Implementation</i>					
Cluster 1 – Sensitizing	x	x			
Sensitizing policy makers/planning					
Educate and propose to policy makers pollinator friendly practices					
Assist law makers to develop enabling environment for pollinator/pollination promotion					
Cluster 2 – Tools	x	x			
Develop and implement voluntary measures (e.g. certification mechanisms, codes of conduct)					
Carry out consultations to promote pollinator friendly policies					
Propose incentives for farmers having pollinator friendly agriculture					
Standardize organic farming					
Implement economic instruments (fiscal, credit, etc)					
Develop and propose/negotiate policy instruments					
Develop conservation strategies for pollinators					
Cluster 3 – Target subjects	x	x			
Promote nesting places for pollinators					
Promote reduction of pesticide use to enhance pollinators					
Promote use of bee-keeping for pollination of crops					
Promote habitat management practices to enhance pollinators					
Promote multi-cropping and inter-lines/hedgerow and no-till, to enhance pollinators					
Promote restoration of threatened pollinators					
Promote alternate food sources for pollinators					
Enabling policies at landscape level					
Promote forest islands					
Community forestry					
Cluster 4 – Analysis	x	x			
Review (local and global) existing and recommend					
Revision of pollinator conservation aspects incorporated into policies under review					
Miscellaneous					
Encourage promotion of pollinator-friendly policies					
Formulate pollination-friendly policies					
Policies which promote best practices and incentives					
4.3 Sharing					

Cluster 1 – Strategy	x	x			
Identify relevant materials					
Identify target stakeholders (farmers associations and groups; extensionists; NGOs; policy makers; teachers; researchers; media; general public)					
Assessment and dissemination of experiences and project results					
Produce in pictures and local languages					
Publication strategy					
Cluster 2- Dissemination tools	x	x			
Disseminate information by IT					
Cluster 3 – Exchange	x	x			
Enhance bringing foreign experience to participating countries					
Enhance sharing of local experiences to other regions and countries					
Strengthening existing network sustainable agriculture focus on pollinators					
Exchange programmes between demo sites					

Annex 4

AGREED CRITERIA FOR SELECTION OF DEMONSTRATION SITES AGREED AT THE 2ND MEETING OF THE ISC

SELECTION CRITERIA

- Crops¹ important for food security and/or livelihoods
- Pollination problem identified
- Community co-operation
- Community organization
- Partner capacity
- Access to the sites during pollination season
- Willingness of site owners/community to agree that the site will be available during project duration, and with the same conditions throughout the project period

DESIRABLE CRITERIA

- Availability or proximity of experimental stations
- Knowledge of farmers of pollinator issues/management
- Market opportunities
- Traditional knowledge
- Conservation initiatives
- Expertise available near on-site
- Available facilities
- Co-funding availability
- Sites can be reached with reasonable ease
- Plant/pollinator specificity identified
- Political and social stability
- Availability of alternate foraging/nesting sites in the vicinity of demonstration sites
- Vicinity of natural areas
- Innovative Farmers community
- Adequate size for demonstration/experimentation site

MATRIX

- Diversity of crops and crop systems
- Diversity of ecological zones
- Socio-cultural diversity
- Diversity of pollinators
- Intensity of cultivation
- Intensity of use of external agricultural inputs
- Landscape – whether the site is near protected area, or large cultivated zone, etc
- Comparison elements
- Control sites

¹ “Crops” includes horticultural, field, orchard, cultivated fruit and tree crops

Annex 5

EP/GLO/301/GEF CONSERVATION AND MANAGEMENT OF POLLINATORS FOR SUSTAINABLE AGRICULTURE, THROUGH AND ECOSYSTEM APPROACH

- Development of Co-Funding Strategy -

The following document proposes a series of steps that can be taken by each participating country and FAO, to develop and implement a co-funding strategy at the national and global levels, which is crucial in the preparation of the Full-size Project (FSP).

There are two points of entry, for this process:

- i. Who is *already* active in the area (information available through baseline information collection already undertaken)
- ii. Who *could be* interested in becoming active

The co-funding strategy calls for a structured approach in *compiling information on*, and *documenting* potential donors.

1. Identify on-going activities related to the four main components of the FSP:
 - a. Development of a knowledge base
 - b. Extension and promotion of pollinator-friendly best management practices
 - c. Capacity building and awareness raising
 - d. Sharing of experiences and dissemination of results
2. Identify who is undertaking these activities.
3. Identify who these activities are being funded by, and “cross-reference” the specific activities with the donor (i.e. identify what donors are funding which activity).

(Activities 1-3 include organizing the information that was collected during the stock-taking process).

4. Identify what activities could be linked to/build upon/have relevance for, the Full-size Project.
5. Make a list of potential donor categories, and identify their priorities for funding:
 - (i) thematic areas
 - (ii) geographical areas

Donor type

- a. multi-lateral
 - i. international agencies
 - ii. international banks
 - b. bi-lateral
 - i. governments
 - ii. embassies
 - c. foundations
 - d. conservation groups
 - e. private sector
6. Research specific types of funding procedures for each identified donor.
 7. Compile and organize the information collected, into the table format provided in this document.

Inputs on the co-funding strategy should be **delivered to FAO by the week of 31 January 2005.**

EXAMPLE OF CO-FUNDING IDENTIFICATION TABLE

Table of Potential Donors

	Multi-lateral	Bi-lateral	Foundations	Conservation Groups	NGOs
FSP Activity					
Development of a knowledge base					
Extension and promotion of pollinator-friendly best management practices					
Capacity building and awareness raising					
Sharing of experiences and dissemination of results					

EXAMPLE OF CO-FUNDING IDENTIFICATION TABLE - STEP #2

DONOR – (one for each donor type)

	Priority (geographic)	Priority (thematic)	On-going activities
Donor			
name			

Annex 6 “To Do List”

II. Stocktaking
activity: Current
Status

	1st workshop (stakeholders)	first draft stocktaking	Agree upon methodologies for assessment to be applied during FSP, taking into consideration country specificities	Collate baseline data (e.g. literature reviews, national initiatives, existing databases, other information networks)	Review local management practices and traditional knowledge (national and international level)	Analyse enabling environment (e.g. policy, legislation – including where applicable trends) (national and international level)	2nd workshop (partners)	global IT study
Brazil	x							
Ghana	x	x		x	x		x	x
Kenya	x	x		x	x		x	x
South Africa	x	x		x	x		x	
India	x	x		x	x		x	
Nepal	x							
global (Prepare global study papers and global workshops, on a needs basis -)		x		x	x			x

II.
 Stocktaking
 activity:
 Priority
 attention

	1st workshop (stakeholders)	first draft stocktaking	Agree upon methodologies for assessment to be applied during FSP, taking into consideration country specificities	Collate baseline data (e.g. literature reviews, national initiatives, existing databases, other information networks)	Review local management practices and traditional knowledge (national and international level)	Analyse enabling environment (e.g. policy, legislation – including where applicable trends) (national and international level)	2nd workshop (partners)	global IT study
Brazil	x							
Ghana	x	x		x	x		x	
Kenya	x	x		x	x		x	
South Africa	x	x		x	x		x	
India	x	x		x	x		x	
Nepal	x							

Ghana	x			x						
Kenya	x			x						
South Africa										
India										
Nepal										
global (Prepare global study papers and global workshops, on a needs basis -)							x			

global (Prepare global study papers and global workshops, on a needs basis -)								x		
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V. Development of Implementation Strategies for the Full-size Project and Mobilisation of Co-financing

	Identify stakeholders	Prepare plan for partner participation
Brazil	x	
Ghana	x	
Kenya	x	
South Africa	x	
India	x	
Nepal	x	
Global		

VI. Formulate the implementation process and design of the M & E component for the FSP including agreement on indicators to be measured for baseline establishment

	Agree on set of activities, emphasis in each country, level	Project progress refinement and finalization of baseline indicators (based on new guideline for GEF) for each output	Agreement upon Monitoring and Evaluation Plan
Brazil			
Ghana			
Kenya			
South Africa			
India			
Nepal			
Global			

V. Development of
Implementation

Strategies for the Full-size Project and Mobilisation of Co-financing

	Identify stakeholders	Prepare plan for partner participation
Brazil	x	
Ghana	x	
Kenya	x	
South Africa	x	
India	x	
Nepal	x	
Global		

VI. Formulate the implementation process and design of the M & E component for the FSP including agreement on indicators to be measured for baseline establishment

	Agree on set of activities, emphasis in each country, level	Project progress refinement and finalization of baseline indicators (based on new guideline for GEF) for each output	Agreement upon Monitoring and Evaluation Plan
Brazil			
Ghana			
Kenya			
South Africa			
India			
Nepal			
Global			

To-Do list (Global):		deadline
1	reorganise/rationalise set of activities	20-Dec
2	coordinate approach to assessment methodologies(both biological and economic)	TBA
3	coordinate preliminary analysis of enabling environment	TBA
4	coordinate capacity building and public awarenessstrategy	TBA

5	develop matrix of demonstration sites, review diversity of sites and systems	first-15Jan; 2nd-20 Feb
6	compile baseline scenarios and costs	first-10 Feb; 2nd 28 Feb
7	compile incremental cost estimates by activity	first 10 March; second 20 March
8	compile partner participation and project implementation plans	15-Mar
9	first draft proposal	30-Mar
10	develop indicators and M&E plan	next ISC meeting
11	flyer for cofunding	15-Jan
12	global cofund map	20-Jan
13	global cofund strategy	30-Jan
14	review stocktaking for gaps	first 22 Dec, second 15 Jan
15	develop provisionional indicators	15-Apr

16	report to GEF, copy to partners	first Jan; second July
17	remind everyone of deadlines; ISC communication	regularly
18	coordinate cross-country cooperation demands and opportunities	36570

To-Do list:		deadline
1	respond to Arthur Chapman on IT needs, attachment + new questions	Dec. 23
2	complete stocktaking- with particular attention to literature review and enabling environment	actual: as by LOA/rea lity: Jan 31
3	work with global coordinator on assessment methodologies(both biological and economic)	
4	work with global coordinator on preliminary analysis of enabling environment	TBA
5	hold second national workshop (partners) if not yet held	Feb-04
6	complete capacity building and public awareness needs assessment	10-Jan

7	work with global coordinator on cohesive strategy development for capacity building and awareness raising	TBA
8	Agree on set of activities, emphasis in each country, level	15-Jan
9	develop provisional list of demonstration sites, priority cropping systems	15-Feb
10	finalise baseline scenarios and costs by activity	31-Jan
11	develop incremental cost estimates by activity	28-Feb
12	develop partner participation plans and project implementation plan	28-Feb
13	develop indicators and M&E plan	next ISC meeting
14	co-funding map	31-Jan
15	co-funding strategy	20-Feb
16	co-funding confirmed/secured	night before submission
17	country endorsement	check country procedures

18	demands and opportunities for cooperation with other partner countries identified	31-Jan
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