

Training Course on Invasive Alien Species Management for East and Southern Africa, 7 to 11 November 2005

Background

A series of Regional Workshops run by the Global Invasive Species Programme and its partners between 2001 and 2004 identified training and capacity building in invasive species management as a priority. The Global Invasive Species Programme contracted the Invasive Species Specialist Group of the World Conservation Union (IUCN) to develop a set of generic training modules. This was completed during the first half of 2004. CAB International (Africa Regional Centre) was contracted to customise these generic modules for Eastern and Southern Africa.

The customised modules were used as a base for the delivery of a pilot course in East Africa in the latter half of 2004. The delivery of this pilot course was assessed by independent assessors. The recommendations made by the independent assessors and the comments received from the participants and trainers were taken heed of when the course was modified in mid 2005. The revised training course was delivered during November 2005.

Delivery of the course

The training course was delivered at the VIP Hotel Conference Facilities in Maputo, Mozambique between 7 and 11th November, 2005. It was attended by participants from both Environmental and Agricultural Departments, from African Countries and including representatives from Kenya, Tanzania, Mozambique, Uganda, Eritrea and Ethiopia. Attendance was excellent, and there was a high level of participation in the proceedings.

Further details can be found in the Annexes as follows:

- 1) Course Programme
- 2) List of course participants
- 3) Report from John Mauremootoo CAB International Trainer
- 4) Report from Anastelle Solomon Independent Trainer
- 5) Report from independent assessors

ANNEX 1

Training course programme

<u>DAY 1</u>	<u>7 November 2005</u>	<u>Coordinator</u>
09h00	Welcome of participants by Minister for Coordination for Environmental Affairs	Anselmina Liphola
10h00	Reception tea	
10h30	General introduction to the course	Philip Ivey
11h00	Module 1 - Introduction to Invasive Alien Species	Anastelle Solomons
14h30	Module 2 - Goals & Principles of Invasive Species Management	John Mauremootoo
19h30	Evening cocktail reception	Global Invasive Species Programme
<u>DAY 2</u>	<u>8 November 2005</u>	
09h00	Module 3 – Prevention	John Mauremootoo
11h30	Module 4 - Early Detection & Rapid Response	Anastelle Solomons
14h30	Module 5 - Incursion Management	John Mauremootoo
<u>DAY 3</u>	<u>9 November 2005</u>	
09h00	Module 6 – Eradication	John Mauremootoo
11h30	Module 7 – Control and Mitigation	John Mauremootoo
14h30	Module 10 – Raising Awareness and Education	Anastelle Solomons
<u>DAY 4</u>	<u>10 November 2005</u>	
	All day field trip	
<u>Day 5</u>	<u>11 November 2005</u>	
09h00	Module 8 – International Response	Philip Ivey
11h30	Module 9 – Developing a National Framework	Philip Ivey

Annex 2

List of participants and core organising team

Participants

	Name	Position	Organisation	Address	Country	e-mail	Telephone
1.	Mr Estifanos Bein	Director Environmental Quality Division	Regulatory Services Department, Ministry of Agriculture	PO Box 1162, Asmara	Eritea	estbein@eol.com.er	+291-1-159 271
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3.	Mr Shewaye Deribe	Angiosperm Biodiversity Specialist	Environmental Protection Authority	PO Box 12760, Addis Ababa	Ethiopia	shewaderibe@yahoo.com	+251 (0)11 646 4569
4.	Mrs Judith Mutea	Plant Protection Officer	Ministry of Agriculture	PO Box 64531, Nairobi	Kenya	inguta@yahoo.com	+254 (0)722 792 862
5.	Mr Samson Ntabo	Research Assistant Coordinator	National Environment Management Authority	PO Box 67839 00200, Kapiti Road, Nairobi	Kenya	sbokea2003@yahoo.com.uk gdnema@swiftkenya.com	+254 (0)20 605 522
6.	Mr Pitso Masupha		Ministry of Tourism, Environment and Culture	Agricultural College Campus, House No 7, PO Box 829, Maseru	Lesotho	pvmasupha@yahoo.com	+266 5804 4430
7.	Mr Thulo Qhotsokoane		Ministry of Tourism, Environment and Culture	Ha Leqele Maseru, PO Box 13925, Maseru 100	Lesotho	ghotsokoanesabs@ilesotho.com	+266 5886 7274
8.	Mr Inacio Damiao		DPCA - Tete	PO Box 469, Tete,	Mozambique	damiaokita@yahoo.com	+258 (0)82 389 9039
9.	Dr Pius Rafael		MICOA – CDS Natural Resources	PO Box 9, Chimoio, Manica	Mozambique	balidynavanavake@libero.it	+258 (0)82 823 7210
10.	Eng Domingis Cugala		Agronomy Faculty, University Mozambique	University Campus	Mozambique	dcugala@zebra.uem.mz	+258 (0)82 314 8430
11.	Mr Abu A. Jone		MINAG - DINA	FPLM Avenue, Maputo	Mozambique	Telinha2002@yahoo.com.br	+258 (0)82 807 6000
12.	Dr Custodio da C. Mario		MICAO	Acordos de Lusaka Ave, 2115, PO Box 2020, Maputo	Mozambique	custodiomaphossa@yahoo.com.br	
13.	Eng Guilhermina Amurane		MICOA / DNGA / DCRN	PO Box 2020, Maputo	Mozambique	gamurane@yahoo.com.br	

14.	Lisete Dias		National Water Directorate	Ministry of Public Work and Housing	Mozambique	lisetedias@hotmail.com	
15.	Eng Alberto Chemane		DPCA	Gaza Province	Mozambique	x.dpcag@teledata.mz	
16.	Mr Ray Gama		Swaziland National Trust Commission	PO Box 100, Lobamba H107	Swaziland	director@sntc.org.sz	+268 416 1489
17.	Mr Ngwane Dlamini		Swaziland National Trust Commission	PO Box 100, Lobamba H107	Swaziland	director@sntc.org.sz	+268 416 1489
18.	Mr Septh Maphalala	Biodiversity Programme Officer	Swaziland Environment Authority	PO Box 2652, Mbabane	Swaziland	seabiodiv@realnet.co.za	+268 (0)603 7711
19.	Mr Thomas Bwana	Senior Environmental Officer	Division of Environment	PO Box 5380, Dar es Salaam	Tanzania	tbwana2000@yahoo.com	+255 (0)22 211 3983
20.	Mr Fabian Cornelius Mkondo	Agricultural Officer, Plant Health Services	Ministry of Agriculture and Food Security	PO Box 9071, Dar es Salaam	Tanzania	mkofabi@yahoo.co.uk	+225 (0)22 286 5642
21.	Mr Salvatoris Byarugaba		Ministry of Water, Lands and Environment	PO Box 27314, Kampala	Uganda	Salvatoris004@yahoo.com	+256 789 58 286

Course Coordinators, Trainers and Evaluators

	Name	Position	Organisation	Address	Country	e-mail	Telephone
Trainer	Dr John Mauremootoo		CAB International		Kenya		
Trainer	Ms Anastelle Solomon						
Evaluator	Ms Ana Milena Varela		ICIPE	PO Box 30772, Nairobi	Kenya	avarela@icipe.org	
Evaluator	Mr Fausto Vicente Mbazo		MICOA		Mozambique		
Trainer / Coordinator	Mr Philip Ivey	Programme Coordinator	Global Invasive Species Programme	c/o SANBI, Private Bag X7, Claremont, 7735	South Africa	ivey@sanbi.org	+27 (0)21 799 8837
Administrator	Ms Dorothy Whiting	Administrator	Global Invasive Species Programme	c/o SANBI, Private Bag X7, Claremont, 7735	South Africa	whiting@sanbi.org	+27 (0)21 799 8836

Annex 3: Report from John Mauremootoo – Course Trainer

22 November, 2005

Introduction

The course ran from Monday 7th to Friday 11th November. I delivered the following five of the ten modules from Monday 7th – Wednesday 9th November:

- 2 - Goals & Principles of Invasive Species Management
- 3 – Prevention
- 5 - Incursion Management
- 6 – Eradication
- 7 – Control and Mitigation

I attended the modules delivered by Anastelle Solomon

- 1 - Introduction to Invasive Alien Species
- 4 - Early Detection & Rapid Response
- 10 – Raising Awareness and Education

I left on Thursday so did not attend the field visit or the modules delivered on Friday (8 – International Response and 9 – Developing a national framework)

As I did not attend the entire course, it is not possible for me to give comprehensive feedback. From the days in which I participated I felt the course went very well. There were some areas which I felt could be improved upon in the future. The following is a brief account of what I felt were the strengths of the course, some areas for improvement and some suggestions for follow-up.

The Modules and PowerPoints

The modules have been changed since we delivered them in the pilot course held in Kenya in October 2004.

Changes made included the following:

- Reduction in the number of introductory modules and the amalgamation of the control and mitigation modules.
- The reduction in the numbers of case studies.
- Reduction in the use of language which could be construed as patronizing to an adult audience.
- Reduction in use of clipart images.

I think the changes were mainly positive. However, I disagreed with the removal of some of the case studies. I would have liked the case studies to be maintained and even expanded. In order to avoid information overload, case studies could have been included as annexes to the modules.

The PowerPoints were simplified (plain white background and reduction in clipart images). Again this is largely positive. However, I think that it should have been made clear to the facilitators that these PowerPoints needed substantial work before presentation (e.g. insertion of more photos and animation).

The Participants

The participants varied greatly in terms of their prior knowledge of IAS, probably also educational levels and ability to operate in English. The latter initially limited the participation of the Mozambicans. However, the availability of translation and our efforts to encourage those who felt more comfortable in Portuguese to speak in Portuguese went some way towards reducing this barrier by day 2. Lack of prior knowledge meant some individuals did not participate hugely but such disparities are inevitable in a course of this nature. The use of group work at least meant that everybody had a chance to participate to some degree.

There was one individual who had participated in the pilot course in Kenya. Such repeat participations should be avoided. Encouragingly it was clear that this individual had learned a great deal during and since last year's course. The repeat participation helped to reinforce the lessons learned last year and so, although it should be discouraged the repeat participation was not a waste of time.

Facilitation and teaching methods

I got the impression that the facilitation worked well and that participation levels were good. The participants wanted case studies they could identify with and wanted to contribute their own knowledge. This message was clear from day 1 and was communicated through the evaluators. This feedback proved very valuable to me as I had time to alter my approach for subsequent modules. Some means of getting such independent on the spot feedback should be maintained for all such courses in future.

Having two facilitators present at all times was useful as we could compare notes after sessions and within sessions while the participants were doing group work. This was an improvement over the 2004 course when I was present at all times but other facilitators were not. Another advantage of having two main facilitators interacting closely was that we could be flexible with regard to the timing and duration of the modules.

Group work appeared to be popular. However, it took more time than we budgeted for. Based on feedback from last year where it was stated that too little time was spent on group work I decided to give the participants more time than was planned for. In future sufficient time needs to be budgeted for group work from the beginning.

Logistics

The venue was adequate. There was enough room and translation was available, which was essential for the smooth running of the course. Equipment was not always sufficient. It would have been useful to have had a larger supply of permanent marker pens as the ones we had rapidly dried out because of the air conditioning. We also had insufficient 'blu-tak' for sticking flip chart sheets on walls. I would recommend that a list of supplies to be provided by the organizers is made and that this is circulated to the facilitators in good time so that additions can be made.

People are increasingly traveling to such events with their laptops. I would recommend that participants are asked to bring laptops and to use them to write up their group work for projection where possible.

Per diems was clearly an issue that distracted attention. The amounts available and conditions that apply need to be clearly spelled out to the participants in advance. One person from the organizing team needs to be responsible and this person should not also be responsible for delivery of the course.

Ideally all facilitators should be available for the entire duration of the course for continuity. I do, however, understand the financial constraints.

Holding the course in Mozambique was a good idea in many respects. However, it would have been logistically easier to have held this course in South Africa (where GISP is based) or in Kenya (where the CABI Africa Regional Centre and the IUCN Office for Eastern Africa have a long experience of organizing such events). Nairobi or Johannesburg would probably also have also been cheaper options because of direct flight connections.

Follow up

Even though I did not attend the entire course it appeared to be clear that there was now a group who understood invasive species issues at least to some degree. Some follow up activities now need to be done so that this knowledge is put to good use. Here are some suggestions in this regard:

- ***Invasive species strategies and action plans*** – Many people expressed interest in producing these. This interest should be encouraged. I spent a lot of time talking to the Kenyan participants about this. CABI is keen to pursue this.
- ***Further courses in Africa*** – Other people would benefit from attending this course. I am keen to deliver this type of course to stakeholders under the UNEP/GEF project *Removing Barriers to Invasive Plant Management in Africa* being implemented by CABI and IUCN in Ethiopia, Ghana, Uganda and Zambia. There also exists the possibility of implementing further training courses in Africa under the recently funded GISP PDF-B *Building Capacity and Raising Awareness in Invasive Species Prevention and Management*.
- ***Training of trainers courses*** – The individuals who attended this course and the pilot course held in 2004 would make ideal trainers for future in-country courses. However, I think that further training would be needed for these individuals before they could competently deliver the modules. A training of trainer course would help in this regard.
- ***Awareness raising for decision makers*** – The importance of raising the awareness levels of decision makers was mentioned many times. A module produced for this purpose would be very useful. This could be delivered at the opening of the course.
- ***Dissemination of course materials to stakeholders*** - The training modules are a useful resource and should be available to interested parties. Uploading them to the GISP website will facilitate this.

Conclusion

I felt the course succeeded in its objectives. Further delivery will result in its continued improvement as long as there is some degree of continuity in this delivery. I was very grateful to have been invited to facilitate having been involved with the delivery of the pilot course in 2004. It was also very useful to have Anna Varela as the lead evaluator. I would be extremely happy to facilitate again and feel that this would help in providing continuity. Finances permitting I would like to be able to facilitate throughout the course.

Annex 4

AN INTRODUCTION TO INVASIVE ALIEN SPECIES MANAGEMENT

Report on the GISP Training Course

16 January 2006

Trainer: Anastelle Solomon (Environmental consultant for Zezacon cc)

1. INTRODUCTION

I delivered the following modules at the GISP training course during 7 to 9 November 2005.

- 1 - Introduction to Invasive Alien Species
- 4 - Early Detection & Rapid Response
- 10 – Raising Awareness and Education

I attended the other modules delivered by Dr. Dr. John Mauremootoo on 7 to 9 November 2005.

The report has been divided into specific headings that discuss the strengths and challenges of the course.

2. ORGANISATION & PREPARATION

The administration preparation of the course was done very well. Liaison and communication was efficient and consistent. Necessary information was communicated effectively.

OPPORTUNITIES FOR IMPROVEMENT

- Recruitment of trainers should be done in advance. (at least two months in advance)
- Trainers should be given training materials in advance to ensure more time for preparation.
- Briefing sessions to be conducted with trainers in advance.
- Trainers should be present for the duration of the course if financially possible.

3. TIMEFRAMES

The project objectives were achieved under very tight deadlines. Another success is that so many senior staff was able to attend a week-long training course on IAS. Participants were committed to participate in all the course modules irrespective of impromptu time alterations.

OPPORTUNITIES FOR IMPROVEMENT

- Course trainers must have more time in preparing for the different modules.
- Trainers should have clear and realistic indications of time required for the delivery of specific modules prior to conducting the training.
- More time should be made available to participants to complete workshop tasks.
- Consider reducing the content of the course or providing more time so that all content can be adequately dealt with.

4. PARTICIPANTS

The participants who attended the training course displayed a remarkable sense of commitment, interest and flexibility. The levels of maturity and professionalism of the participants assisted in the successful delivery of the content. The course was enriched by the experience and expertise that the participants shared in the course. The IAS information shared in the course contributed to the enrichment of both the trainers and the participants who participated.

OPPORTUNITIES FOR IMPROVEMENT

Each participant should be requested to submit a brief portfolio which could assist in identifying who the participants are, where they come from, what their interest in the course are, what their expectations are and what their workplace responsibilities are. This will assist the trainers in pitching the training at the required levels.

Participants should bring along more IAS information about their countries. Participants should present specific case studies or problems experienced in the specific countries.

5. COURSE CONTENT

The course content was compiled professionally and it was easy to use. The content in the modules were flexible enough to accommodate the diversity of the participants. The content read well and was logically organized. The combination of content, case studies, pictures and activities assisted greatly in training the information to the diverse group of people.

OPPORTUNITIES FOR IMPROVEMENT

More examples of IAS case studies relevant to the SADC countries should be included in the course material.

Time allocation for the training of modules should be specified. This will eliminate the situation where modules requiring more time need to be rushed or compromised in the training venue.

6. SPECIFIC ATTENTION

The module on communication, awareness and education requires a rethink and rewriting. It is my opinion that the module does not address the communication, awareness and education requirement adequately. Much emphasis is placed on how to develop posters, which should not necessarily be the focus of the module. It lacks concrete content to explore and address the present trends and developments in the fields of communication, awareness raising and education.

It is my recommendation that the objectives and the content of the module be revised and developed to reflect the current trends and developments within the specific fields.

The content also need to provide greater guidance to the participants in how they can use the tools and methods of communication, awareness raising and education to engage stakeholders and their citizens.

This module should receive the same status as any of the other technical content modules in its writing and compilation.

7. TRAINERS

Dr. Mauremootoo and myself trained on 7 to 9 November. The other days were left to Mr. Ivey. The rotation method of training worked very well between Dr. Mauremootoo and myself as it provided time to refresh for the next training module. The method also kept the participants refreshed and stimulated. The inclusion of the evaluators during the course contributed to the success of the course. The ongoing feedback from the evaluator assisted in highlighting specific participant's needs, which in turn gave the trainers the opportunity to respond immediately. The process of evaluation was also conducted very professionally.

Opportunities for improvement

Trainers should have time to meet and prepare jointly before commencement of the course. This will assist in planning for daily time and content specifics.

8. VENUE, ACCOMMODATION AND TRAVEL

The venue was conducive for the type of training that was conducted. Accommodation and food was of a high standard. Traveling to Mozambique proved to be a challenge for some of

the participants as it is not the most accessible country. A few of the participants arrived exhausted as they were in transit for a few days before arriving at the venue. Others arrived late due to the traveling problems.

Opportunities for improvement

Consider a venue that is more accessible.

9. CONCLUSION

Training on the course was a wonderful experience. I thank the organizers for the opportunity to form part of a highly skilled and hardworking team of people. Together with the participants I learnt very valuable information, which I can use in my other work. My overall opinion of the course is that it was a huge success and a much needed course. My recommendation to the organizers is that the course should be conducted more frequently so that more people will begin to understand the enormous dangers and challenges faced with IAS for their countries and themselves.

Annex 5: Report from Ana Milena Varela – Independent Evaluator



EVALUATION OF THE REGIONAL TRAINING COURSE “AN INTRODUCTION TO INVASIVE ALIENS SPECIES MANAGEMENT”

8 – 11 November 2005

Maputo, Mozambique

by
Ana Milena Varela
On behalf of ICiPE, Environmental Health Division

Photograph; Water hyacinth in Incomati river, Manhiça District, Mozambique

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Executive summary

Invasive alien species (IAS) pose a great danger to biodiversity, threaten food security, human health, and in general, are a treat to human economic interests. The growing concern about the importance of IAS issues and the urgent need to address these effectively is manifested in the Convention of Biological Biodiversity (CBD). This led to the formation of the Global Invasive Programme (GISP).

Africa has its good share of IAS and their effect on the economy and livelihood of the people of continent is an issue of growing concern. Building national and regional IAS management capacity is a requisite in the prevention and management of IAS. To address this need, GISP developed a training course in IAS management, which was customised for East and Southern Africa, and tested in a pilot training workshop in Nairobi in October 2004. A revised regional training course was held in Mozambique in November 7-11. Twenty-two participants from eight countries of Southern and Eastern Africa attended the revised course. They have diverse backgrounds and are involved to different extents in IAS management in their countries.

This report presents the evaluation of the revised regional course on request of GISP. The course was evaluated by studying the relevant documentation, monitoring all course activities, and through evaluation by participants in the form of open questionnaires.

The revised course consists of ten modules dealing with the major aspects of IAS. The modules were delivery in a concise manner, with a good combination of group work and lectures. Whenever possible local/regional examples were used during the course. The instructors were clear, and encouraged participation. The course participatory approach was highly appreciated by the participants. However, the delivery of the course was constrained by time shortage. More time for discussions of the group work, country reports on IAS and a final discussion would have added much value to the course. The participants felt that more time was needed for the module on developing a national framework. More emphasis should have been given to planning, reporting and proposal writing to facilitate securing funds to fight IAS.

The field visit to a sugar company was well organised, and was a good complement to the topics dealt with in the course.

INTRODUCTION

Invasive alien species (IAS) are non-native organisms whose establishment and spreading in a new environment are detrimental to ecosystems, biodiversity, health, economics or other aspects of human welfare. The spread of IAS has increased and is likely to be exacerbated by continuing globalisation. In Africa, IAS is an enormous and continuously growing problem, both in terms of the number and diversity of invasive species, and on the threat posed to the native biodiversity and to peoples' livelihood.

The Global Invasive Programme (GISP) is an international partnership that aims to coordinate and facilitate responses to the growing threat of invasive alien species. Its mission is to conserve biodiversity and sustain livelihood by minimising the impact of IAS. Capacity building is one of the main components of its programme. In this context GISP developed a training course in IAS management, which was customised for East and Southern Africa, and tested in a pilot training workshop in Nairobi in October 2004. The course was revised following evaluation of the pilot course, and a revised training course was held in Mozambique in November 7-11 for participants of Southern and Eastern Africa.

This report presents the evaluation of the revised regional course "An introduction to the Management of Invasive Alien Species " on request of GISP.

The evaluation was conducted by Ana Milena Varela for the International Centre of Insect Physiology and Ecology (ICIPE) and Fausto Vicente M'bazo from the Ministry of Coordination for Environmental Action (MICOA) Mozambique.

Methodology

The evaluation of the course was done in accordance to the terms of reference (Annex 1) as follows:

- Determination of expectations of participants and instructors by means of cards during the first day of the workshop.
- The content and delivery of modules was evaluated through monitoring the delivery of each module, and by a questionnaire filled by the participants at the end of each module. This also used as a way of measuring how expectations were met, and facilitated feedback from the participants to the instructors and organisers.

- The overall evaluation of workshop was done by studying the modules and other relevant documents, by monitoring all activities of the workshop, and by a final questionnaire filled by participants at the end of the course.

Course Evaluation

Course contents

The course is an introductory course on management of invasive alien species (IAS). It is aimed at those involved in IAS prevention and management, especially in developing countries. The revised course targets IAS managers in Southern and Eastern Africa. It consists of ten modules (compared to 12 in the first version of the course). The first module introduces IAS (definition, types of introductions, process of invasion, pathways and impacts). Module 2 presents the goals and principles of IAS management. The five following modules present the general management options for IAS. Module 3 (Prevention) illustrates measures for avoiding or reducing species introductions. Module 4 (Early detection and Rapid Response) deals with eradication of small founder populations. Module 5 “Incursion Management” gives an introduction to options for the management of established IAS populations. These options are dealt with in more detail in the two following modules: “Eradication” (module 6) and “Control and Mitigation” (module 7). The last modules of the course discuss the importance of creating a supporting environment for effective IAS management. Module 8 (The International Response) places the issue of IAS in the international context, and gives an overview of international initiatives related to IAS. Module 9 (Developing a National Framework) points out the need for a National Strategy for IAS management and highlights the principles for the formulation, design and implementation of a National framework. Module 10 explains why raising awareness and educating stakeholders are essential components in the strategy against IAS, and describes how to design an awareness raising campaign.

Due to commitments by the presenter, the module on raising awareness had to be presented before the modules “The International Response” and “Developing a National Framework” (see annex 2 for an overview of the course). This change did not affect the flow of the course. The module “The International Response” was presented last, after the module on “Developing a National Framework”, which was a good way to complete the presentation of the modules.

The contents are adequate to meet the objectives of the course as an introduction to IAS management. The rearranging of the modules (merging of the general introductory issues in one module, and allocating one module to the issue of National strategies) allows for better time management, giving more time to management issues, raising awareness and education, and putting more emphasise on the importance of developing National strategies. The module “Planning and Reporting” was eliminated, and the information incorporated, though in less detail, in the management modules, in particular in the new module “Incursion Management” under management guidelines.

Participants

Twenty-two participants from eight countries were registered (see annex 3). They come from diverse backgrounds (agriculture, environment, conservation, and academia) and are currently involved, to different extents, in IAS management in their countries. Two of the participants attended the pilot training course held in Nairobi last year.

The participants were active and interacted freely during the group exercises and presentations. Initially the Portuguese-speaking participants were shy but after the first day they participated actively during the group exercises and discussions. In general, participants were open and eager to contribute and share experiences.

Course delivery

There was a good combination of group work and lectures in most modules (see annex 2). The presenters tried to include examples from the region as much as possible. They placed the different modules in the context of the course.

The language of the written material is more technical and the layout has been improved making it easier to follow and more appropriate for this kind of audience.

In general, the presentations were clear and focused. A few of the Portuguese-speaking participants had problems following the presentations during the first day, but later they adjusted to the simultaneous translation.

Presenters made an effort to encourage participation, and gave equal opportunities to all participants to contribute. Practical group exercises were conducted during most modules making the course interactive. This was highly appreciated by the participants.

During the first day the English-speaking participants dominated the discussions. Although most participants understood and spoke English, some of the Portuguese-

speaking participants felt shy to talk. The presenters encouraged them to make use of the simultaneous translations and this problem was overcome on the second day.

The participants had the opportunity to interact, discuss and share experiences during the group work. However, it would have been useful to have a final discussion after the presentation of the last module. This would have given the participants the opportunity to share the course experiences in the light of newly acquired knowledge, to address issues arising during each module, and to discuss the way forward.

Field trip:

A visit to the Sugar Company “Maragra”, in Manhiça District was organised by the National Directorate of Environmental Management (MICOA – DNGA).

In general the field trip was well organised. The manager and the agronomists of the farm gave the group a warm welcome, and presented a video showing the history of the company. This was followed by a presentation of the problems they are facing with water hyacinth (photographs and live specimens). The water hyacinth is a big problem in the area. It is present in the Incomate River, which comes from South Africa. The weed clogs the drainage systems, invades the irrigation canals, and gets into the turbines of the pumps. They form a tick mat on the river, making movement of small boats difficult, and in general affecting the ecosystem in the river.

The company purchased 600 weevils with support from the Government, and are trying to rear and release them. They have released some but so far there is no major effect on the invasive weed. They do not have sufficient resources to rear the weevils in enough numbers. The water hyacinth in the canals is being managed by mechanical removal and localised herbicide application when necessary.

Another invasive species *Chromolaena*, which is also becoming a problem, is being managed through sanitation (removal and burning).

The agronomist gave an overview of the pest and disease problems they are facing. They are comfortable with the management of most pests and diseases and have produced a manual. He pointed out the lack of a regulatory system in Mozambique, restricting movement of sugarcane, such as the one in place in South Africa. A discussion ensued on the importance of control and regulatory mechanisms to avoid the movement of invasive species (including pests and diseases).

Following the presentation the group went through the plantation to the river to appreciate the magnitude of the problem. Some parts of the river are completely covered with the weed. Other IAS (e.g. lantana) were observed near the riverbank.

The visit was within the scheduled time, and participants had ample time to see the problem caused by water hyacinth and to discuss the issue with the company managers. However, it would have been useful to have a wrap-up discussion with the participants including other IAS observed during the visit. There was a brief mention of the visit the following day.

Duration of the workshop and time management:

The course delivery was constrained by lack of time. In fact, the course was delivered in four full working days since the 10th was a local holiday (118th anniversary of Maputo) and the afternoon was free (though the participants were given assignments by the instructors), and the last day was only half a day due to commitments of the organisers of the course, who had to travel back to South Africa in the afternoon. One more day would have allowed more time to expand in some of the modules, for country presentations, presentation of complementary materials (e.g. videos), and for a final discussion session.

In general, the time allocated for the modules was right, with the exception of modules 5 (Incursion Management), and 10 (Developing a National framework). In view of the importance of good (coherent and defensible) plans, progress assessment and reporting to secure support and to optimise chances of success, more detail should be dedicated to these important topics in module 5. A whole morning/afternoon should be allocated to the issues of developing a National strategy

The time foreseen for group activities was not enough, and more time had to be given to allow the completion of the exercises. In some cases the presentations and follow-up discussions were rushed. The difference in languages added to the delay since no simultaneous translation was done during the group work.

The opening ceremony of the course was aired in the evening programme of the official TV channel. This was a good way of creating public awareness about the issue of IAS in Mozambique.

Course evaluation by participants

The evaluation by participants was based on individual evaluation of modules (Annex 4) and overall course evaluation (Annex 5).

Overall the pilot training course was rated as good by 59% and excellent by 41% of the participants. The course as a whole met the expectations of most participants (96%) (Refer to Annex 6 for participants' expectations). Participants were satisfied with the course contents (see below), but concerning the logistics, there was general unhappiness regarding the issue of daily subsistence allowances (DSA). The participants found the DSA not enough (also catering for dinner), and were not happy with the arrangements of an organised lunch. Some thought that this has interfered with the course since they were distracted by this problem. There were even speculations that this may have explained the absence of participants from other countries such as South Africa, Botswana, Zimbabwe, Malawi and Namibia.

Course content:

The content of the course was deemed appropriate by all participants, since the principles in IAS management were covered, good background information was provided, and whenever possible local examples were used. The information provided was relevant, giving or adding useful knowledge for the management of IAS. Some participants said that they have gained a lot of information, despite the short time. However, four percent of the participants felt that the course was too general and that more details should have been given. They expected information on the biology and management of the most problematic species in the region. According to them, the course has introduced the participants to the management of IAS, but this is not enough for the participants to initiate, independently, IAS programmes.

The objectives of the modules were met to varying extents (see annex 4). Most learning outcomes were clear to the majority of participants. Some of the participants had problems in understanding some of the concepts in most modules. For instance, there was some confusion in pathway and vector perception and in species invasiveness after the completion of the first module. Issues that were not clear according to the evaluation of each module were addressed immediately or the following day whenever possible.

Most modules were rated as excellent or good. A few participants considered the modules on "Early detection and rapid response", "Incursion management", "Control and mitigation", and "Raising awareness and education" vague.

Teaching approach:

The participants appreciated the modular approach. Thirty two percent of them considered it excellent and 64% good. They were of the opinion that the modules were well prepared, neat and clear, presented in a logical sequence, with good flow of information from introduction to end.

Most participants rated all instructors as good. They considered the presenters were well prepared delivering the modules in a in a clear and simple way. Especial praises went to Philip Ivey for an excellent presentation of the modules on "International Response" and "Developing a National Framework" in spite of the short time available.

The participants considered that the course had a good participatory, interactive approach. Good sharing and confidence building was encouraged. Each member felt as somebody in the course. Almost everybody participated; this was only constrained by lack of sufficient time

The participatory sessions were rated good (41%) to excellent (54%). The group exercises were important for sharing of experiences notwithstanding the difference in languages. It was entertaining for participants. In particular they appreciated the sharing of knowledge from other countries, and thought that country presentation on IAS would have added a lot of value to the course. The course opened their minds to think regional, at the level of continents and globally. It was felt that more countries from the region should have been represented in the course.

Teaching materials:

The written material provided to the participants was considered relevant and timely. Reference to training material during presentation was good.

The Power Point presentations were considered excellent (59%) or good (41%). They made presentations lively by combining seeing and listening. They enhanced understanding and are good for adult learning. However, some participants felt that following the Power Point presentations tended to hurry the delivery process

Field visit:

The visit to the Maragra Sugar Company was considered very relevant by most participants (91%). They were exposed to the problem caused by water hyacinth, in particular their negative impact on agriculture and water resources, and to the

challenges involved in managing its spread. Some participants thought that there should have been more opportunities to discuss and propose solutions for monitoring and control of this and other IAS found on the farm. One of the participants said that he/she would have preferred to see a community getting to work rather than a company with enough resources and which is more profit than ecological oriented.

Duration of workshop and individual modules:

The duration of the training course was considered adequate by most participants as an introductory course to IAS (73%). Twenty three percent considered the duration inappropriate, since the programme was tight and some topics were rushed. In general the allocation of time to the modules was considered satisfactory, but many participants thought some modules needed more time, in particular the module “Developing a National Framework” and to some extent “Control and Mitigation”.

Although most participants considered that they were given the opportunity to interact and discuss during the group exercises, they thought that more time is required to discuss and share experiences. In many instances discussions had to be stopped due to time constraints. This was aggravated sometimes by language problems between English and Portuguese speakers.

The participants felt that it would have been useful to make time for presentation of country reports on the status of IAS, particularly on management strategies.

Most important points learned from the workshop

- IAS are a real danger to Africa They are more than just a nuisance, and their spread has serious economic implications
- The different types of IAS
- The basic principles for management of IAS (prevention techniques, early detection and rapid response, raising awareness, how to develop national strategies, etc.)
- Prevention is always the best and less costly option
- Control at entry point is crucial
- It is crucial to have an immediate, clear National strategy for combating IAS
- African governments lack resources to carry out prevention, eradication, and control measures
- The value of awareness raising at all levels and the need for networking (sharing of information) between stakeholders at local, national, regional and global level

- Acting in time it is very important to prevent / avoid major losses due to IAS
- IAS is more than a national issue. The problems in our countries are similar and should be addressed regionally
- Need for a multisectoral approach for management of IAS
- Importance of stakeholders participation, and of a coordinated National strategy
- Taxonomy is important for IAS management
- Assessment in the areas of occurrence is the first step in managing IAS
- The international response to IAS
- The experiences and approaches to fight IAS in participant countries
- “Doing nothing” is a strategic management option
- Making of posters

Participants’ comments and recommendations on the way forward:

- Hope to keep in contact and have further opportunities to share information and update on relevant issues, with every individual and especially with GISP
- Start IAS monitoring and develop a data base on IAS at the regional level
- Design and implement specific control systems utilising experts and the best practises for specific IAS
- Develop a work plan to control water hyacinth in Incomati River
- Ensure the formulation of national and regional IAS strategies and their implementation
- Enforce existing regulations
- Verify whether capacity building is being implemented
- Start awareness campaigns for IAS in our respective countries and on the continent to prevent the extinction of some species and to preserve and protect our ecosystem
- Fundraise
- Open up GISP offices in each country
- GISP should monitor the impact of the course
- GISP must demand periodical progress reports from focal points despite not funding anything yet
- Start regional cooperation in management of IAS. This can be achieved by having National action plans and harmonising initiatives requiring a regional approach
- Sensitise governments that allocation of an adequate budget for control, management and creation of a National strategy against alien plants is critical to

ensure food security, which is an issue for the nations facing problems of HIV and hunger

- Use participatory training approaches to secure the support of stakeholders
- Focus on areas affected by IAS
- Measure the actual impacts of IAS (one terrestrial, one aquatic, one insect pest) in any of the countries
- Build our National programmes concentrating first on awareness raising and capacity building
- Provide tools such as laptop computers and accessories
- Develop phase II of the training taking into consideration the following recommendations
 - ❖ This course was good as an introduction to IAS, but should be followed by an advanced course, for instance training of trainers, at regional or national levels. This should be in the form of a more in-depth training course with the same participants, to handle, in more detail, specific IAS elements such as management options, legislation/policy issues, and how to develop a working strategy in the region.
 - ❖ The time allocated needs to match the curriculum. Time is needed to present individual country reports and to optimise sharing of experiences and practices in IAS management. Eight to 10 days are suggested.
 - ❖ It should have a problem-solving approach where participants can present case studies for discussion.
 - ❖ The letter of invitation should be sent well in advance to facilitate country reporting.
 - ❖ Involve experts on taxonomy and include field training on identification of IAS
 - ❖ Include clear examples and case studies (successful and unsuccessful) from participant countries.
 - ❖ It should be held in a different country.
 - ❖ Incorporate resource persons from countries more advanced on IAS management.
 - ❖ More field trips to identify problems caused by IAS.
 - ❖ Provide information on ways/approaches to solicit funding for IAS management. There is a need to include project/programme identification and negotiation skills in line with the impacts of IAS.

- ❖ Review the requirements for daily upkeep of participants. Consider standardising per diems according with other regional/global organisations. The course could be held in a lower class hotel (four stars) and reasonable daily subsistence allowances provided.

Conclusions

The course was adequate as a general introductory course on IAS. Most of the relevant issues related to IAS and their management were covered, although not in detail. Local examples were used whenever possible through out the course. The instructors were well prepared and delivered the modules in a concise manner. There was a good combination of group work and lectures in most modules.

The level of experience of the participants varied, and this was reflected in the level to which their expectations were met. The course was basic, too basic for some participants; they were expecting a more in-depth course where issues of specific IAS (e.g. *Prosopis* and water hyacinth) could be discussed and a solution worked-out during the workshop.

Insufficient time was a constraint during the course. One more day would have allowed more time for discussions, to expand on some of the modules and for country presentations. Presentations of the situation of IAS or/and of case studies in the participant countries at the end of the modules would have been very useful. This could have been a way of relating the situation in the countries in the region to the issues discussed during the course. A good way for wrapping up the course would have been a final general discussion on the experiences during the course and the way forward.

More time should be given to planning and reporting, and to proposal writing to facilitate soliciting of funds to address IAS.

Annex 1: Terms of Reference:

Independent Course Evaluator “An introduction to the Management of Invasive Alien Species”, 7 – 11 November 2005,
VIP Hotel, Maputo, Mozambique

OBJECTIVE:

Monitor and evaluate the content and delivery of the course, and compile and present a concise report to the Director

BACKGROUND

Course team:

Dr John Mauremootoo (CAB International)

Ms Anastelle Solomon (Zezacon CC)

Mr. Philip Ivey (GISP Secretariat)

Ms Dorothy Whiting (GISP Secretariat)

Course modules

1. Introduction to invasive alien species
2. Goals and Principles of IAS Management
3. Prevention
4. Early Detection & Rapid response
5. Incursion Management
6. Eradication
7. Control and Mitigation
8. The International Response
9. Developing a National Framework
10. Raising Awareness and Education

Terms of reference

The Independent Course Evaluator is expected to monitor and evaluate the content and delivery of the GISP IAS course, and compile and present a concise report to the Director GISP by close of business (17:00 South African time) on Friday, 9 December 2005.

He or she shall:

1. Conduct review on background information on the IAS management course and the participants
2. Design mechanism (e.g. questionnaire) for daily evaluation of course delivery
3. Attend all presentation, group discussions, practical work and mandatory field trips
4. Establish expectations of both participants and course instructors at beginning of course using cards
5. Evaluate match between expectations of participants, instructors, GISP secretariat, modules and feedback to course instructors
6. Monitor extent to which expectations are being met, using inputs from 2, 4 and 5 above.
7. Collate all course records on participant comprehension of course modules
8. Write report

Annex 2: Course overview

Date	Module	Trainer	Time allocated (hours)	Practical exercises/ other activities
7 th November 2005	1: Introduction to invasive alien species	Anastelle Solomon	2 hours	Group exercise: Sectoral analysis of the impacts of IAS and implications for sectors.
	2: Goals and principles of IAS management	John Mauremootoo	2 hours and a half	Group exercise: Develop a matrix (see module 2, page 6.)
8 th November	3: Prevention	John Mauremootoo	4 hours	Two group exercises on risk analysis
	4: Early detection and rapid response	Anastelle Solomon	2 hours and 10 minutes	Planned exercise on survey not conducted due to lack of time. Participants were asked to do it later
	5: Incursion management	John Mauremootoo	Half an hour	No practical session
9 th November	6: Eradication	John Mauremootoo	1 hour and 45 minutes	No practical session
	7: Control and mitigation	John Mauremootoo	4 hours and a half	Group exercise on planning a control programme for a selected IAS (one a half hours)
	10: Raising awareness and education	Anastelle Solomon	2 hours and a half	Group exercise on developing a poster to raise awareness using the case study of the Golden Apple Snail
10 th November	Field trip	Coordinated by Anselmina Liphola	5 hours	Visit to sugar factory "Maragra" in the sugar cane growing area of Manhiça Distric
11 th November	9: Developing a national framework	Philip Ivey	3 hours and a half	Group exercise (three groups) to develop the outline of a national strategy and a strategic framework for three imaginary countries
	8: International response	Philip Ivey	1 hour	Same group as in previous module were asked to list international conventions or bodies related to IAS

Annex 3: Participants of training course: An Introduction to Invasive Species Management held in Maputo, Mozambique, 7-11 November 2005

	Name	Country	Institution
1	Mr Inacio Damiao	Mozambique	MICOA ¹ (Ministry of environment)
2	Dr Pius Rafael	Mozambique	MICOA-CDS – Natural Resources
3	Mr Salvatoris Byarugaba	Uganda	Ministry of Water, Lands and Environment
4	Mr Estifanos Bein	Eritrea	Ministry of Agriculture
5	Mr Yohanes Abraham	Eritrea	Ministry of Land, Water and Environment
6	Mr Shewaye Deribe	Ethiopia	Environmental Protection Authority
7	Mr Thomas Bwana	Tanzania	Ministry of Environment
8	Mr Fabian C. Mkondo	Tanzania	Ministry of Agriculture and Food Security
9	Mrs Judith Mutea	Kenya	Ministry of Agriculture. Pesticide Advisory Services, Weeds and Pathology
10	Mr Samson Ntabo	Kenya	NEMA ² , Department of Environmental Planning and Research
11	Mr Ray Gama	Swaziland	SNTC ³ , Wildlife services. Department of National Parks
12	Mr Ngwane Dlamini	Swaziland	SNTC ³ , Wildlife services.
13	Mr Septh Maphalala	Swaziland	Swaziland Environment Authority
14	Mr Pitso Masupha	Lesotho	Ministry of Agriculture (ARD)
15	Mr Thulo Qhotsokoane	Lesotho	Department of Environment. NES
16	Eng Domingis Cugala	Mozambique	MICOA, Department of Environment
17	Mr Abu A. Jone	Mozambique	Ministry of Agriculture
18	Dr Rafael Massinga	Mozambique	Agrarian Research Institute
19	Dr Custodio da C. Mario	Mozambique	MICOA- DCRN ⁵ (Department of Natural Resources)
20	Eng Guilhermina Amurane	Mozambique	MICOA/ DNGA ⁶ /DCRN-B (Department of Natural Resources- Biodiversity)
21	Lisete Dias	Mozambique	MICOA-National Water Directorate
22	Eng Alberto Chemane	Mozambique	MICOA

¹ MICOA: Ministério para a Coordenação da Acção Ambiental. Direcção Nacional de Gestão Ambiental

² NEMA: National Environmental Management Authority

³ SNTC: Swaziland National Trust Commission

⁴ UEM: Universidade Eduardo Mondlane

⁵ DCRN: Departamento de Conservação de Recursos Naturais

⁶ **DNGA: Direcção Nacional de Gestão Ambiental**

Annex 4: Evaluation of individual modules by participants after completion of each module

Module	Participants	Duration (%)				Trainer (%)			Teaching approach (%)				Content (%)				Own expectations (%)			
		Too short	Too long	Right	No answer	Average	Good	No answer	Too Theoretical	Too practical	Right	No answer	Too easy	Too difficult	Good	No answer	Not met	Reasonably met	Fully met	No answer
1: Introduction to invasive alien species	18	6	6	83	5	12	83	5	6	6	83	5	12	0	83	5	0	61	28	11
2: Goals and principles of IAS management	16	0	19	81	0	12	88	0	6	6	88	0	0	6	94	0	6	62	32	0
3: Prevention	21	10	57	33	0	29	67	4	19	10	71	0	5	14	81	0	5	71	14	0
4: Early detection and rapid response	21	5	24	71	0	19	81	0	19	10	71	0	19	5	76	0	5	62	33	0
5: Incursion management	22	41	5	50	0	14	86	0	32	5	63	0	5	0	95	0	0	82	18	0
6: Eradication	20	5	25	70	0	20	75	5	35	0	60	5	20	0	80	0	0	65	30	5
7: Control and mitigation	18	0	56	39	0	11	89	0	0	0	100	0	0	0	100	0	0	72	22	6
8: International response	21	14	14	72	0	5	95	0	9	15	76	0	9	0	91	0	5	42	48	5
9: Developing a national framework	22	14	14	68	4	9	91	0	4	4	92	0	9	0	91	0	4	32	60	4
10: Raising awareness and education	17	0	47	47	6	17	83	0	12	6	82	0	6	6	88	0	0	53	47	0

continued

ANNEX 4: Evaluation of individual modules by participants (continued)

Module	Partici pants	Objectives of the modules	Achieved			Participant comments
			Yes	No	No Answer	
1: Introduction to invasive alien species	18	1. Define invasive alien species	100	0	0	<ul style="list-style-type: none"> – There should be a more interactive way of presentation – A five minute interval is required – More practical approach could help to keep the class lively – Thank you for making the model very easy to understand. Scientific lessons should be as easy as possible for people to follow – More time needed for group presentations/discussion
		2. Describe invasion patterns and pathways	83	17	0	
		3. Illustrate important differences between intentional and unintentional introductions	89	11	0	
		4. Give an overview of the global impacts of invasive alien species	78	16	6	
		5. Explain why we cannot predict species invasiveness with certainty	50	39	11	
		6. List some of the characteristics of invasive alien species	89	6	5	
		7. Identify major factors that increase IAS incursions	78	16	6	
2: Goals and principles of IAS management	16	1. Outline the goals and basic principles of IAS management	88	12	0	<ul style="list-style-type: none"> – A good and interactive presentation, but time for interval needed – Include information on international agreements, other s than CBD – A practical exercise was useful as it eased learning – Include practical case studies, especially of our region
		2. Describe the steps in IAS management	81	19	0	
		3. Indicate the points at which management action can be applied	94	6	0	
3: Prevention	21	1. Explain the principles of prevention	90	5	5	<ul style="list-style-type: none"> – Good examples. It was good each group had different species
		2. Describe the approaches and tools required for a basic risk analysis	90	10	0	
		3. Demonstrate how and where to apply prevention measures	81	19	0	
		4. Give examples of appropriate prevention measures	71	29	0	

ANNEX 4: Evaluation of individual modules by participants (*continued*)

Module	Partici pants	Objectives (As given in the modules)	Achieved			Participant comments
			Yes	No	No Answer	
4: Early detection and rapid response	21	1. Explain the role of early detection and rapid response	100	0	0	<ul style="list-style-type: none"> – The practical exercise, which could not be done due to lack of time, would have been clearly useful – The demonstrations and teaching are very clear – The survey method is rather too costly to be implemented by our debt ridden, HIV, poverty ridden government. However, the presentation and the issue of data base are excellent – The presentation good, but was made dull by reading out the power point presentation. – Discussion were lively and the information given very useful – Eventually hope in a better future was reckoned – Case studies/success stories needed
		2. Describe basic principles of early detection and rapid response	95	5	0	
		3. Detail the components of early detection and rapid response and associated issues	81	19	0	
5: Incursion management	22	1. Describe options available for managing IAS	91	5	4	<ul style="list-style-type: none"> – Presentation was good, but trainer was too fast and time was too short – Should print out some basic legal framework to be put in place for individual countries
		2. Highlight the differences between the various incursion management options	82	14	4	
		3. Introduce the methodologies related to the incursion management options	82	14	4	

continued

ANNEX 4: Evaluation of individual modules by participants (*continued*)

Module	Partici pants	Objectives (As given in the modules)	Achieved			Participant comments
			Yes	No	No Answer	
6: Eradication	20	1. Define eradication	100	0	0	<ul style="list-style-type: none"> - Very good presentation with good examples, making the module lively and educative, but too long. It should be divided into sessions - Very interesting successful case studies worldwide, but should be included in the power point presentation - It was the most lively and participatory presentation of all in the last three days
		2. Explain when and where eradication is the preferred management option	90	10	0	
		3. Give the requisite conditions for a successful eradication	90	10	0	
		4. Describe the basic principles and key steps of an eradication	85	15	0	
7: Control and mitigation	18	1. Explain when control and when mitigation are the preferred IAS management options	94	6	0	<ul style="list-style-type: none"> - It is reasonably prepared, but do not forget to regularly update it - Good presentation - The practical exercise was long and quite demanding - Excellent group presentation and very practicable for each country - Given the current situation of IAS, the module was very relevant. However, the time provided was a bit short - Too long and exhaustive
		2. Describe the different approaches taken to control IAS	100	0	0	
		3. Discuss reasons why mitigation might be the only management option	94	6	0	
		4. Outline the levels at which mitigation measures can be taken	100	0	0	
8: International response	21	1. Describe the international regulatory regime for IAS	95	5	0	<ul style="list-style-type: none"> - Good information and useful for compliance and coordination - Too short and hurried
		2. Provide an overview of international initiatives that promote information sharing and provide support for invasive species management	100	0	0	

Continued

ANNEX 4: Evaluation of individual modules by participants (*continued*)

Module	Partici pants	Objectives (As given in the modules)	Achieved			Participant comments
			Yes	No	No Answer	
9: Developing a national framework	23	1. Show why a holistic approach to IAS (a National Strategy) is the most efficient and effective system for managing IAS at a national level	100	0	0	<ul style="list-style-type: none"> – Is should be given more time – I would have expected a complete national strategic framework as example. – Was too nice – It will be useful to get the draft of the national strategies developed by the groups – I am very much concern with sources of funding since IAS are either not, or at the bottom last of government priorities
		2. Outline the essential components of a national strategic framework for IAS management, including a National Strategy, institutional structure and capacity, legislation/policy and related issues	100	0	0	
		3. Describe how a national framework can be developed and implemented	96	4	0	
		4. Highlight the key principles underlying the formulation, design, and implementation of a National framework	100	0	0	
10: Raising awareness and education	17	1. Highlight the importance of raising awareness in the strategy against IAS	100	0	0	<ul style="list-style-type: none"> – Please make resources available for these who want to adapt the developed materials (posters) to local scenario – Good presentation and lively – The approaches and presentations are very clear and focused
		2. Outline the important points for raising awareness	100	0	0	
		3. Describe how to design an awareness raising “campaign”	94	6	0	

Annex 5: Overall course evaluation by participants at the end of the training course

How do you rate the pilot training on IAS management	Participants	Excellent	Good	Vague
	22	41	59	0
Were the aims/objectives of the course achieved?		Yes	No	Partially
	22	96	0	4
		Exceeded	Met	Failed
Did the training course exceed, meet or fail you expectations?	22	0	96	4
Was the content of the course appropriate / inappropriate for IAS managers		Appropriate	Inappropriate	
	22	100	0	0
Was the content of the course appropriate/inappropriate for conditions in E. and S Africa?	22	100	0	0
How do you rate the content of the training course		Excellent	Good	Poor
	22	23	77	0
How do you rate the modular approach used in the training course		Excellent	Good	No answer
	21	32	64	4
How do you rate the written materials disseminated during the training	22	50	50	0
How do you rate the quality of the PowerPoint presentations	22	59	41	0
How do you rate the quality of the participatory sessions?	21	54	42	4
Was the duration of the training course appropriate/inappropriate		Appropriate	Inappropriate	No answer
	21	73	23	4
Were you given sufficient time for discussion and sharing of information?		Yes	No	No answer
	20	78	18	4
The time allocation to individual modules was		Adequate	Inadequate	No answer
	22	91	9	0
The field trip to the sugarcane growing region in Manhiça District was		Very relevant	Moderately relevant	No answer
	21	71	24	5
Would you recommend a similar approach in future training courses for IAS managers		Yes	No	No answer
	20	91	0	9

**ANNEX 5: Overall course evaluation by participants at the end of the training course
(continued)**

How do you rate the individual modules?

Module	Total responses	Excellent (%)	Good (%)	Vague (%)
1: Introduction to invasive alien species (IAS)	20	70	30	0
2: Goals and principles of IAS management	20	40	60	0
3: Prevention	22	18	82	0
4: Early detection and rapid response	22	45	50	5
5: Incursion management	22	18	77	5
6: Eradication	21	29	71	0
7: Control and mitigation	22	41	50	9
8: International response	22	54	46	0
9: Developing a national framework	22	64	36	0
10: Raising awareness and education	21	38	57	5

Annex 6- Summary of participants' and trainers' expectations given on at the beginning of the course.

Participants' expectations:

At an individual level

- Improve my knowledge and have better on the different types of IAS, how they affect agriculture and the environment, and the sustainable methods to control and prevent further spread of IAS
- Gain the required skills to deal with IAS destroying our crops, and aggravating the high levels of poverty in the Republic of Mozambique
- Gain knowledge to be able to monitor IAS affecting our rivers
- Learn about the extent of problems posed by IAS in Africa and gain capacity to manage them
- Learn more on the larger grain borer, water hyacinth and grassland invasions
- Gain skills to perform better taking into consideration that I am working on the CBD
- Adequate compensation for my time. A good rate for out of pocket allowances. Current rate to small
- Learn about success stories in the region
- Contribute to management of IAS in the country
- Take home adequate literature
- The field trip will serve as the best example of what is being done to manage IAS
- Clarity from presenters

Institutions and networking

- Sharing of ideas and experiences from other countries on how to deal with IAS
- Collaborate with related institutions to develop a successful country programme
- Use knowledge on IAS to develop a regional initiative
- Improve the institutional capacity to coordinate the country efforts to control IAS
- Gain knowledge to improve my services in the organisation
- Obtain a reduction in IAS problems to improve the water quality of our rivers, lakes and springs since we are in charge of water resources
- Improve availability of expertise in IAS
- Build partnership with relevant organisations
- Be able to contribute in my institution on IAS with concrete ideas on how to monitor, control or eradicate IAS
- Correspondences update
- Find collaborative ways of controlling IAS regionally
- Develop collaborative initiatives on prevention, identification and management of IAS
- Collaboration between countries to allow quick identification of IAS and identify easy solutions
- Expect network for technical advice/capacity sharing
- International commitment in IAS eradication

Capacity building, awareness and training

- Get capacity to undertake survey and surveillance
- Train students on IAS and their management
- Get enough material to organise workshops to create awareness about IAS
- Dissemination of information on IAS among students
- Share what I learn with members of staff (maybe give a report or organise a training)
- Build institutional capacity in areas of environmental management.

- Improve the countries' capacities in identifying and controlling IAS
- Improve my training skills

Management and regulatory tools

- Be able to conduct pest risk analysis
- Get a legal framework to prevent cross borders movement of dangerous species
- Harmonization of laws
- Develop coordinated viable mechanisms to deal with the treat of exotic and invasive species
- Develop IPM initiatives
- Learn sample methodologies
- Develop a practical strategy for IAS control

Planning and policy formulation

- Include IAS in the national policies and legislation reviews
- Recommendations for an integrated and multidisciplinary control approach at a national and regional basis
- Gain political will and support
- Governments and decision-makers should commit themselves and to inform communities about the threat posed to biodiversity by IAS, which is affecting food security
- Be able to contribute to the development of a national policy to control IAS

Funding

- Know funding opportunities
- Know how to fundraise for this programme
- Get financial support

Institutional/regional

- Establish IAS free areas
- Mitigate IAS in areas where IAS have already been established
- Improve livelihood security in IAS in already invaded areas
- Start programmes of removing IAS in the country

Trainers's expectations:

At the individual level:

- Share information adequately
- Learn form others
- Train the course successfully
- Present a good and well listened to course and active participation of individuals.
- Better understand the IAS issues in the region
- Be a valuable resource person.

At the institutional level

- As an institution we hope to have successfully trained the participants. They need to be enthusiastic in delivery of the course contents back home.
- Further collaborate with others from the region
- Exchange IAS information
- Help contribute to organisations bottom line!

At the Country-regional level

- NEPAD and Africa is able to deliver a comprehensive management plan for invasive species in the continent.