REPUBLIC OF UGANDA

VIEWS AND EXPERIENCE ON THE MANAGEMENT OF INVASIVE ALIEN SPECIES

INFORMATION SUBMITTED TO THE CBD SECRETARIAT

BY

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18th NOVEMBER 2006

1.0 BRIEF BACKGROUND

Uganda signed and ratified the Convention on Biological Diversity (CBD) in June 1992 and September 1993 respectively. Uganda also signed the Cartagena Protocol on Biosafety on 24 May 2000 and ratified it on 30th November 2001. Uganda is actively involved in the implementation of the various Articles of the Convention including Article 8(h) which calls up each Contracting Party to as far as possible and appropriate prevent the introduction of, control or eradicate those alien species which threaten ecosystems, habitats or species. Section 2 gives progress Uganda has made in the implementation of the COP Decisions on invasive alien species and in section 3, proposals are made for the way forward to further enhance control/management of invasive alien species in Uganda.

Decision VIII/27: Alien species that threaten ecosystems, habitats or species (Article 8 (h)): Further consideration of gaps and inconsistencies in the international regulatory framework

Decision	Progress of implementation
3.Welcomes the development of the biodiversity and invasive alien species module of the United Nations Environment Programme's project on Issue-Based Modules (IBM) for Coherent Implementation of Biodiversity-related Conventions, as a helpful tool for implementation	♦ Uganda is one of the pilot countries participating in the IBM project which focuses developing practical tools to promote coherent implementation of 5 global biodiversity conventions: CBD, CITES, Ramsar Convention on Wetlands, CMS and World Heritage Convention. The National Environment Management Authority (NEMA) coordinated the project on behalf of the Government of Uganda; ♦ Four modules related to biodiversity were identified under the project: Inland Waters, Climate Change, Sustainable Use and Invasive Species. Uganda reviewed and provided input on Sustainable Use, participated in Steering Committee Meetings and the Africa Regional Workshop which discussed the draft prepared on the four modules; ♦ The IBM provides a very quick and useful framework for accessing all the decisions on IAS and therefore a very useful tool that facilitates coordination/collaboration between National Focal Point for biodiversity related conventions; ♦ The IBM is a computer based module. Therefore financial support is needed to expand the IBM to wider stakeholders through training, provision of computers and materials.
4. *Encourages* Parties to build capacity for action at the national level for addressing the various pathways for introduction and spread of invasive alien species,	♦ Uganda is one of the four countries participating in UNEP/GEF Project on *Removing Barriers to Invasive Plant Management in Africa.* The coordination is being undertaken by CABI - ARC (CABI Africa Regional Centre) and the World Conservation Union Eastern Africa Regional Office (IUCN - EARO), while the National Agricultural Research Organisation (NARO) is the National Executing Agency in Uganda ♦ Project activities are being undertaken under the following four interlinked components: a) Strengthening the enabling policy environment for invasive species management b) Provision and exchange of critical information amongst key stakeholders in invasive species management; c) Implementation of invasive species control and prevention programmes;

	d) Building capacity for sustainable invasive species prevention and management. Project implementation started in December 2005 and will end in December 2009. Over the period of the full GEF project the interventions related to capacity building will achieve the following: a) The provision of a link between capacity building/training needs assessment, dissemination of information and replication of successful management practices; b) The development of capacity for management of IAS through training based on identified training needs; c) The development of knowledge and skills in communication for dissemination of information on IAS and replication and dissemination at the local, national, regional and international levels. Two pilot sites have been chosen under this project: Budongo Forest Reserve and Lake Mburo National Park. The Budongo Forest Reserve harbours the endangered Chimpanzee, and has been designated as an Important Bird Area - Uganda's second most important bird area. The challenge is to balance conservation of forest biodiversity and ecological processes, production of hardwood timber on a sustainable basis and the needs of local communities. Management of the impacts of *Senna spectabilis*, an invasive species covering more than 1,000 ha of the forest, forms part of this challenge. Under the proposed project Senna management trials will be undertaken in the Budongo Forest Reserve, where management by manual and chemical means will be investigated along with active forest restoration and Senna suppression methods. Lake Mburo National Park has been designated as an Important Bird Area with over 310 bird species documented. The park has seen a reduction in diversity of large mammals through a combination of human impact from tsetse fly control, habitat destruction through cultivation, settlement and the impact of domestic animals. This may have been spearheaded by the expansion of Cymbopogon, an aggressive grass species, which now covers up to 70% of the surface area in some parts of the park, thus excluding other plant species and reducing forage available to wild animals. During the proposed project, integrated management methods will be pioneered for Cymbopogon affected areas both inside and outside the park. Additionally, an area-wide Water Hyacinth management programme will be undertaken by

	the project, to prevent the park waters and lakes becoming infested via rivers and ponds which are already infested, and connect directly with the lakes in the National Park. The development objective (goal) of the project is to conserve ecosystem, species and genetic diversity in Africa by protecting it from the threat of invasive species. The project will contribute to this goal through its immediate objective (purpose) of removing the barriers to the management of invasive species through effective implementation of CBD Article 8(h) in four representative African countries. The focus will be on invasive plants, as this group poses the greatest current threat, and because a number of invasive plant species have been identified in the four countries requiring immediate attention. A training module has been identified based on a training needs assessment to integrate IAS in the long term into the schools and tertiary institutions. These are: Module 1: Introduction to Invasive Alien Species; Module 2: Goals and Guiding Principles for Invasive Species Management; Module 3: Assessment and Management of Invasive Alien Species; Module 4: Guidelines for Managing IAS in National Parks and other Conservation Areas; Module 5: Best Management Practices for IAS; Module 6: Participatory approaches in IAS management. Due to the importance of training for imparting knowledge and skills to people involved in the management of IAS, dissemination of information and replication of good practices and experiences requiring knowledge and skills in communication, capacity building for management and dissemination of information on IAS will be based on a clear understanding of the training needs identified by the various stakeholders surveyed. The Faculty of Forestry and Nature Conservation in Makerere University, the World Conservation Union (IUCN) and Forestry Resources Research Institute (FORRI) are conducting studies on the impact of IAS on biological diversity and ways of managing them. Even though various aspects of plant biology are taught in several tertiary institutions,

	topics specific to invasive species are seldom covered. This means that whereas capacity in biological sciences is being built, both the lecturers and the graduates are not adequately equipped with the knowledge and skills to manage IAS
11. *Further reiterates* the call to Parties, other Governments and relevant organizations to share their experiences in addressing invasive alien species, including management and control efforts as specified in paragraph 25 of decision VI/23,	♦ An assessment has been carried out in the Forestry, Wildlife and Agricultural sector, to identify key invasive Alien species and the areas that are affected. However, not much has been done yet, regarding measures to eradicate them where they exist. There are however on-going efforts to eradicate *Senna siamea* and *S. spectabilis* in specific protected areas by the Uganda Wildlife Authority (UWA). ♦ The National Environment Act prohibits planting of exotic species close to the borders and also within wetlands. In addition the government has reviewed the Plant Protection Act. The Act provides for Plant quarantine inspectors at key border/ entry points into Uganda to inspect any plant material entering Uganda. ♦ The crop protection department under Ministry of Agriculture, Animal Industry and Fisheries has developed the Plant Protection Act and related regulations which control the introduction of alien species in the country. In order to attain the objective, the department has plant inspectors located at over 25 entry points all over the country. It's at these entry point that inspection of all plant materials is done using the plant protection compendium version 2003 which shows the likely pests, weeds and diseases of the plant from both exchanging countries. ♦ Through the use of the crop protection phytosanitary inspectors, any suspicious plant material entering the country is quarantined and subjected to a period of observation and monitoring until it is confirmed to be safe. In addition, the different lead agencies particularly the Uganda Wildlife Authority, National Forestry authority, Fisheries department as well as the wetlands Inspection division also carry out routine monitoring in all the ecosystems under their control to identify and control any invasive alien species.

	♦ Water Hyacinth has been brought under control, using a combination of physical and biological means. The water weed is no longer a threat to the conservation and sustainable use of biological diversity. The control of the weed which was chocking the bigger part of the lake including breeding grounds for most fish species was removed, thus reducing loss in fish and other aquatic species. Inadequate financial and human resources, poor coordination of different sectoral institutions, inadequate monitoring of all ecosystems. ♦ Over the ten years of challenges of the control the water hyacinth, the dynamics of water hyacinth infestation, its distribution, proliferation and impact modalities, and the development and implementation of appropriate weed control methodologies have been adressed. The water hyacinth has been contained by use of biological control weevils (*Neochetina bruch*i and *Neochetina eichorniae* from Benin), ecological succession by native plants (*Polygonum spp, Pycrius munditi, Commelina bengalensis,* and *Impomea aquatica*) and mechanical control. ♦ MAAIF has a Water hyacinth control unit (formed in reaction to the outbreak), while Uganda Wildlife Authority and the National Environmental Management Authority have Monitoring Units within their set up. Apart from the phytosanitary inspectors at major entry points and water hyacinth control, activities in the area of invasive species control and management have mainly been retroactive rather than proactive, in response to an outbreak of invasive alien species. Attempts are underway to coordinate their activities to ensure more coordinated approaches to biodiversity conservation. ♦ Preparation of a National IAS Strategy, Action Plan and Policy Guidelines has been started which will come up with strategies and actions to address issues on Institution to Coordinate IAS activities in the country including Control, Prevention, Eradication, Early Detection and Rapid Response, Control and Management, Research & Information Management, Education and Public Awareness as well as International Cooperation on IAS. ♦ A review of the Enabling Policy and Institutional Environment for Invasive Plant Species

	has been undertaken. The review recommended the following: a) Development of a comprehensive national IAS strategy, action plan and guidelines on IAS management. Preparation of the strategy has been started. b) Develop mechanisms for institutional collaboration and coordination on the management of IAS. This is being address in the strategy on IAS under preparation. c) Mainstreaming of IAS issues in national planning, policy and legal frameworks. IAS issues to be included in government planning frameworks like the Poverty Eradication Action Plan (PEAP), Plan for Modernization of Agriculture (PMA), Sectoral Plans as well as the NBSAP when they are being reviewed.
13. *Encourages* Parties and other Governments to increase communication and public awareness about the environmental, social and economic impacts of the introduction of invasive alien species according to Guiding Principle 6 contained in the annex to decision VI/23;	♦ Public awareness programmes were very effective in the control of the water hyacinth by the Ministry of Agriculture, Animal Industries and Fisheries (MAAIF). The water hyacinth (*Ecihhornia craaipes*) also known as the water weed and arguably the most noxious aquatic weed in the world was detected in Uganda in December 1989, having entered Lake Victoria from River Kagera. ♦ MAAIF prepared and disseminated awareness materials on water hyacinth explaining what it is, its impacts on water, aquatic life, human health, water transport and hydropower generation and what people should do control it. Radio programmes where also carried out to widen area of coverage. ♦ Furthermore, relevant stakeholders and local communities were widely consulted during the EIA for Water Hyacinth Control Programme in the Country. This made it possible to address concerns of stakeholders and local communities on the control of water hyacinth. However there is need for a study on the socio-economic impacts of IAS to guide decision maker by policy makers. This is very critical activity but Uganda does not have the financial resources for the study. ♦ Under the National Environment Act, it is a requirement that development projects that are likely to cause significant impacts on the environment undergo an EIA to ensure that

	adverse impacts can be foreseen and eliminated or mitigated. It is also a requirement that EIA be conducted by an inter-disciplinary team using a participatory approach, which involves consultations with local communities and other stakeholders. Some projects may be subjected to public hearings depending on their level of controversy. For example a public hearing was held prior to approval of the Environmenta Impact Statement by NEMA on the Control of the Water Hyacinth in the Country. NEMA approved the use of an integrated control programme involving physical (manual and mechanical) and biological control. The use of a herbicide, *2,4-dichlorophenoxyactice acid* and *phosphonomethyl glycine* were not approved on technical grounds arising from the EIA process.
17. *Encourages* Parties and other Governments to organize training and promote education and awareness raising of border control officials and other relevant persons regarding invasive alien species, recognizing that such activities will require adequate resources;	MAAIF, The Uganda Wildlife Authority (UWA), the National Forestry Authority (NFA) and Wetlands Inspection Division (WID) carries out awareness on IAS that have been identified to have negative effects ecosystems and agricultural production. CBOs and CSOs are involved in promoting awareness at grass root/local levels on IAS. However local communities need capacity building to strengthen their participation in the management of IAS. Government of Uganda is preparing a National Strategy and Action Plan on IAS which will cover strategies and action plans for promoting education and raising of awareness on IAS.
18. *Encourages* relevant regional bodies and institutions to develop regional guidance for particular conveyances as pathways for introduction and spread of invasive alien species;	Uganda, Kenya and Tanzania have prepared a Protocol for Environment and Natural Resources Management under the East Africa Community (EAC) cooperation. The three countries signed a Treaty for the Establishment of the EAC on 30th November, 1999. Chapters 19 and 20 of the Treaty provide for cooperation on environment and natural resources management. Article 9(k) of the Protocol Environment and Natural Resources on Biological Diversity provides for the three Partner States to regulate and control the introduction of alien species and eradication of invasive species. The Protocol was approved by the Council of Ministers in April 2006 and is now awaiting ratification by the Partner States.

Decision VII/13: Alien species that threaten ecosystems, habitats or species - Article 8 (h)

Decision VII/13	Progress of implementation
5 (d) *Invites* Parties and other Governments to take into consideration, as appropriate, the risks associated with the introduction, use and spread of invasive alien species during the development, expansion and environmental review of international, bilateral and regional arrangements such as trade arrangements, where appropriate;	♦ Government of Uganda has put in place Regulations on EIA in 1998 and Guidelines for the EIA in 1997. The EIA regulations prohibit a developer/investor/individual from implementing a project or activity for which an EIA is required under the National Environment Act Cap 153 of 1995. The EIA process is coordinated by NEMA on behalf of Government. Any introduction of IAS for commercial purposes or otherwise in the country would therefore be subjected to EIA process which will form the basis for decision making whether or not to authorize the introduction of the IAS. ♦ In addition Uganda is also in the process of developing Guidelines for Strategic Environment Assessment which will make it possible to integrate environment concerns into government policy, plans and programmes. The EAC is in the process of developing regional guidelines that will fully cater for any transboundary effects of project development and require notifying other States in case of imminent / grave danger or damage to biodiversity across the border.
5 (e) *Invites* Parties and other Governments to improve communication and cooperation between national environment, plant protection, trade and other relevant authorities with a view to increasing awareness on issues related to the prevention and management of risks from potentially invasive alien species and ensuring consistency of national policies and programmes.	Article 9(k) of EAC Protocol on Environment and Natural Resources on Biological Diversity provides for the three Partner States to regulate and control the introduction of alien species and eradication of invasive species. Furthermore the EAC is in the process of developing a Regional EIA Guidelines that will fully cater for any trans-boundary effects of proposed projects and require notifying other States in case of imminent / grave danger or damage to biodiversity across the border. Cooperation on issues on IAS wll be further enhanced under the EIA Guidelines for EAC Region.

6. *Invites* relevant Parties to the Convention on Biological Diversity and other Governments, as well as national, regional and international organizations to:	
(a) Improve the coordination of regional measures to address transboundary issues through the development and implementation of regional standards, regional support for risk analysis and regional cooperation mechanisms;	The Protocol for Environment and Natural Resources Management for EAC and the development of a Regional EAC Guidelines for the region discussed above will help in the implementation of this requirement.
(b) Support national and regional decision-making and rapid response through the further development of risk analysis which include environmental risk assessment, as well as alert lists, diagnostic tools and capacity development;	There has been a systematic effort in the control of the water hyacinth by the three EAC States (Uganda, Kenya and Tanzania) in the shared Lake Victoria. The implementation of EAC EIA Guidelines when completed will enhance regional decision making and response on matters concerning IAS including risk assessment. Article 29 of the EAC Protocol for Environment and Natural Resources Management provides for Partner States to harmonize and adopt common policies, laws and programmes requiring the conduct of environmental impact assessments for planned activities and projects which are likely to have significant adverse environment impacts on the environment of the Community, and Each Partner State shall ensure that the regional environment procedures or guidelines for shared ecosystems are observed in carrying EIA in shared ecosystems.
(c) Incorporate invasive alien species considerations, including monitoring and reporting and notification of new threats, into regional agreements and other instruments, and make information on invasive alien species status and trends available through the clearing-house mechanism and other relevant regional information systems;	The EAC regional Protocol for Environment and Natural Resources Management provides a framework for management of IAS under Article 9(k) on Biological Diversity which requires each of the three Partner States to regulate and control the introduction of alien species and eradication of invasive species. There is also a proposal to set up a regional centre of excellence on the management of environment and natural resources.
	Uganda has prepared and is implementing a Biodiversity Conservation Coordination Initiative (BCCI) to enhance coordination and collaboration between institutions and NGOs involved in biodiversity conservation and management. NEMA, UWA, WID and NFA spearhead the development of the BCCI. The goal of the BCCI is to support and facilitate

(e) Strengthen, as appropriate the cooperation between biodiversity, agriculture, forestry, land and water management agencies in the application of risk analysis standards and guidance;	development of relevant and workable approaches to effective biodiversity conservation and natural resources management for the benefit of the local, national and international communities**.** The objectives of the BCCI are to: a) Ensure a coordinated effort of key stakeholders at national and local (field) level in planning and implementation of Natural Resources Management (NRM) programs b) Establish an information exchange mechanism to ensure sharing of information and experiences amongst all stakeholders c) Bring local governments into fruitful partnerships to enhance their active engagement in NRM; d) Coordinate efforts that facilitate community access and distribution of natural resource benefits that contribute to poverty reduction and improved livelihoods through sustainable NRM; e) Contribute to Sectoral policy and legal formulation and improvement; f) Mobilize and ensure equitable distribution of resources to enhance conservation; **g)** Protect land use planning with particular interest to the protected areas and other viable areas outside the protected areas
(f) Consider the introduction of positive incentive measures for the prevention, mitigation, eradication or control of invasive alien species and the use of native species taking into consideration effectiveness in control and impact on the other native species in land and water management and	A National Strategy and Action Plan on IAS is under preparation will address the issues on positive incentive measures for the prevention, mitigation, eradication or control of IAS. A study on the socio-economic impact of IAS is very important on matters concerning positive incentive measures for the prevention, control eradication of control of IAS.

other programmes;	
(g) Proactively engage relevant stakeholders and indigenous and local communities in the eradication, the prevention of introductions, and mitigation of impacts of invasive alien species, including by awareness-raising and training as well as through the design and implementation of appropriate incentive measures;	♦ Relevant sectors of Government especially MAAIF, NFA and UWA are involved in the management of control/management of IAS. Most of the activities are however reactive responding to a problem of IAS which the institution is faced with. The water hyacinth, Nile perch (*Lates niloticus*), are some of the cases well documented. Some work has also been carried out on the Paper mulberry (*Broussonetia papyrifera*) as well as well as on *Senna* spp. However for most of the other species, only identification has been undertaken ♦ The National Strategy and Action Plan on IAS is under preparation once completed and adopted by stakeholders will improve management of IAS through promotion of proactive approach.

Decision VI/23: Alien species that threaten ecosystems, habitats or species

Decision V/23	**Progress of implementation**
10. Urges Parties and other Governments, in implementing the Guiding Principles, and when developing, revising and implementing national biodiversity strategies and action plans to address the threats posed by invasive alien species, to:	
a) Identify national needs and priorities;	Uganda has carried out a training needs assessment for effective management of IPS. The assessment has identified the areas for training and has proposed a training module. The major challenge for the implementation of the training is financial resources.
b) Create mechanisms to coordinate national programmes;	The National Strategy and Action Plan on IAS under preparation will address the issue of having one institution to coordinate activities or programmes on the management of IAS. Currently there is no institution coordinating activities on IAS hence there is gap in coherent management and sharing of information/experience on IAS on-going management/control effort. A national technical committee on Biodiversity is in place, under the National

	Environment Act. The committee has various functions relating to biodiversity conservation, including Invasive Alien species.
c) Review, in the light of the Guiding Principles, relevant policies, legislation and institutions to identify gaps, inconsistencies and conflicts, and, as appropriate, adjust or develop policies, legislation and institutions;	Uganda has through the UNEP/GEF Project on Removing Barriers to Invasive Plant Management in Africa carried out a review of the Enabling Policy and Institutional Environment for Invasive Plant Management in Uganda. The review of the policy and institutional framework recommended the following: 1. Development of a comprehensive national IAS strategy, action plan and guidelines on IAS management as basis for main streaming IAS issues into national planning frameworks. The development of the strategy has been started has stated above. 2. Review and strengthen IAS provision in the NBSAP and the NEAP 3. Facilitate/support implementation of activities and programmes. Review of the NBSAP has been planned however the major constraint is lack of financial resources. In the preparation of the National A National Strategy, Action Plan and Guidelines on IAS, proposals will be made on areas in the NBSAP that needs to address and strengthen issues; 4. Incorporate IAS in the Government Poverty Eradication Action Plan (PEAP) and the Plan for Modernisation of Agriculture (PMA). These will be done during the review/update of PEAP and PMA; 5. Undertake a study on the socio economic impact of IAS linking it to poverty reduction. The constraint for this study is lack of funds for undertaking the study.
d) Enhance cooperation between the various sectors, including the private sector that might provide pathways or vectors for the	Conduct of Conduct for various stakeholders on the management of IAS being addressed in the National Strategy on IAS under preparation. The Code of Conduct will clearly spell out what the private sector and other stakeholders should do on the introductions and

unintended transfer of invasive alien species, in order to improve prevention, early detection, eradication and/or control of invasive alien species, and in particular, ensure communication between focal points of respective relevant international instruments;	management of IAS. One institution –NEMA) is being proposed under the strategy to coordinate all activities and programmes on IAS.
e) Promote awareness of the threats to biological diversity and related ecosystem goods and services posed by invasive alien species and of the means to address such threats, among policy makers at all levels of government, and in the private sector; quarantine, customs and other border officials; and the general public;	This is being done by NEMA and the relevant departments including UWA, NFA and WID as well as NGOs, CBOs and CSOs. The preparation of the National IAS Strategy will further strengthen the process through better coordination as well as sharing of information on IAS management by the various sectors and NGOs. A Policy Guideline on IAS is also under preparation for the policy makers. This process is aimed at developing a full National Policy on IAS in the long-term.
f) Facilitate the involvement of all stakeholder groups, including in particular indigenous and local communities, and the private sector, as well as all levels of government, in national invasive alien species strategies and action plans, and in decisions related to the use of alien species that may	The National Strategy and Action Plan on IAS when completed will clearly bring out the Code of Conduct for the Government, the Private Sector, Botanical Gardens, Tree Nursery Professionals and Farmers. This will streamline and give guidance on what each these bodies should do to enhance management of IAS in Uganda

be invasive; g) Collaborate with trading partners and neighbouring countries, regionally, and with other countries, as appropriate, in order to address threats of invasive alien species to biological diversity in ecosystems that cross international boundaries, to migratory species, and to address matters of common interest;	The EAC Protocol on Environment and Natural Resources has provision on the management of IAS within the region and will enhance cooperation within the EAC on matters concerning IAS
12. Encourages Parties and other Governments, in undertaking this work and, in particular, when developing priority actions, to consider the need to:	
a. Develop capacity to use risk assessment/analysis to address threats of invasive alien species to biological diversity, and incorporate such methodologies in environmental impact assessments, and strategic environmental assessments, as appropriate and relevant;	The most critical step capacity to carry out risk assessment is training manpower to have the required knowledge and skill on the IAS and its management. The training programmes on IAS stated above are a vital component of the risk assessment to address threats of IAS. This is yet to be implemented but lack of funds major constraint. However, general provisions exist and are incorporated in EIA guidelines and procedures to take care of effects a proposed project (including planting /growing of introduced species) to assess their invasiveness as part of the EIA.
b. Develop financial measures, and other policies and tools, to	Government is making contribution towards the management of environment including IAS. The integration of IAS into PEAP, PMA, Government Departments and District

promote activities to reduce the threat of invasive alien species;	Environment Action Plan is the solution for long-term funding from Government on the management of IAS. However in the short-term, developing countries like Uganda need financial and technical support from donors/develop partners to complement their effort.
c. When necessary, develop recommendations and strategies to take account of effects of alien species on populations and naturally occurring genetic diversity;	This is being addressed in the National Strategy and Action Plan on IAS under preparation and these include establishing coverage of IAS in the country, identifying and prioritizing ecosystems in the country negatively affected by IAS and developing and implementing habitat recovery programmes.
d. Incorporate invasive alien species considerations into national biodiversity strategies and action plans and into sectoral and cross-sectoral policies, strategies and plans, taking into account the ecosystem approach, and in order to ensure full implementation of the national invasive alien species strategies and action plans as	The NBSAP is to be reviewed to strengthen its provisions on NBSAP. The National Strategy and Action Plan on IAS under preparation will make recommendations for incorporation into the NBSAP. During the review of PEAP, PMA or any Sectoral Policies, issues on IAS will be proposed, discussed and incorporated as appropriate.

called for in paragraph 6 of decision V/8 of the Conference of the Parties;	
24. Urges Parties, Governments and relevant organizations, at the appropriate level, with the support of relevant international organizations to promote and carry out, as appropriate, research and assessments on:	
a. The characteristics of invasive species and the vulnerability of ecosystems and habitats to invasion by alien species, and the impact of climate change on these parameters[(52)]; b. The impact of alien species on biological diversity; c. Analysis of the importance of various pathways for the introduction of invasive alien species; d. The socio-economic implications of invasive alien species particularly the implications for indigenous and local communities; e. The development of environmentally benign methods to control and eradicate invasive alien species, including measures for use in quarantine and to control fouling of ship hulls; f. The costs and benefits of the use of biocontrol agents to	Limited research has been carried out on IAS due to lack of funding. A more comprehensive research requires financial resources. Developing Countries like Uganda needs financial support from donors/development partners to carry research on IAS. Research on IAS will provide information to guide policy makers and natural resource managers in making informed decisions.

control and eradicate invasive alien species; g. Means to enhance the capacity of ecosystems to resist or recover from alien species invasions; h. Criteria for assessing risks from introduction of alien species to biological diversity at the genetic, species and ecosystem levels; i. The use of the traditional knowledge of indigenous and local communities in the development and implementation of measures to address invasive alien species, in accordance with Article 8(j) of the Convention;	Limited research has been carried out on IAS due to lack of funding. A more comprehensive research requires financial resources. Developing Countries like Uganda needs financial support from donors/development partners to carry research on IAS. Research on IAS will provide information to guide policy makers and natural resource managers in making informed decisions.

Decision V/8: Alien species that threaten ecosystems, habitats or species

Decision V/8	**Progress of implementation**
6. Urges Parties, other Governments and relevant bodies to give priority to the development and implementation of alien invasive species strategies and action plans;	Uganda is developing a National Strategy and Action Plan on IAS which will strengthen government effort in the management/control of IAS in the country.

7. Strongly encourages Parties to develop mechanisms for trans-boundary cooperation and regional and multilateral cooperation in order to deal with the issue, including the exchange of best practices;	Article 9(k) of the EAC Protocol Environment and Natural Resources on Biological Diversity provides for the three Partner States to regulate and control the introduction of alien species and eradication of invasive species. The Protocol was approved by the Council of Ministers in April 2006 and is now awaiting ratification by the three Partner States.
9. Encourages Parties to develop effective education, training and public-awareness measures, as well as to inform the public about the different aspects of the issue, including the risks posed by alien invasive species;	♦ Public awareness programmes were very effective in the control of the water hyacinth by the Ministry of Agriculture, Animal Industries and Fisheries (MAAIF). The water hyacinth (*Ecihhornia craaipes*) also known as the water weed and arguably the most noxious aquatic weed in the world was detected in Uganda in December 1989, having entered Lake Victoria from River Kagera. ♦ MAAIF prepared and disseminated awareness materials on water hyacinth explaining what it is, its impacts on water, aquatic life, human health, water transport and hydropower generation and what people should do control it. Radio programmes where also carried out to widen area of coverage. ♦ Furthermore, relevant stakeholders and local communities were widely consulted during the EIA for Water Hyacinth Control Programme in the Country. This made it possible to address concerns of stakeholders and local communities on the control of water hyacinth. However there is need for a study on the socio-economic impacts of IAS to guide decision maker by policy makers. This is very critical activity but Uganda does not have the financial resources for the study. ♦ Under the National Environment Act, it is a requirement that development projects that are likely to cause significant impacts on the environment undergo an EIA to ensure that adverse impacts can be foreseen and eliminated or mitigated. It is also a requirement that EIA be conducted by an inter-disciplinary team using a participatory approach, which involves consultations with local communities and other stakeholders. Some projects

	may be subjected to public hearings depending on their level of controversy. For example a public hearing was held prior to approval of the Environmenta Impact Statement by NEMA on the Control of the Water Hyacinth in the Country. NEMA approved the use of an integrated control programme involving physical (manual and mechanical) and biological control. The use of a herbicide, *2,4-dichlorophenoxyactice acid* and *phosphonomethyl glycine* were not approved on technical grounds arising from the EIA process.
17. Invites the Global Environment Facility, Parties, Governments and funding organizations to provide adequate and timely support to enable the Global Invasive Species Programme to fulfil the tasks outlined in the present decision.	Uganda has benefited from GEF support in the area of IAS. Uganda is one of the four countries participating in UNEP/GEF Project on *Removing Barriers to Invasive Plant Management in Africa.* The coordination is being undertaken by CABI - ARC (CABI Africa Regional Centre) and the World Conservation Union Eastern Africa Regional Office (IUCN - EARO), while the National Agricultural Research Organisation (NARO) is the National Executing Agency in Uganda

3.0 WAY FORWARD

a) Capacity building is a very important for effective management and control IAS. Developing countries like Uganda need support from GEF, donors and development partners to carry out capacity building programmes which it has already identified.

b) Demand driven research on IAS such as a study on the socio-economic impacts of IAS to guide decision maker by policy makers. This is very critical activity but Uganda does not have the financial resources for the study.

c) There is need for GEF, donors and development partners to support developing countries including Uganda to prepare regulations on IAS to further strength the control/management of IAS.

d) Experience in Uganda has shown that effective local community participation in the control/management of IAS requires actual implementation of activities on ground. GEF support for implementation of community based activities would strengthen community involvement in the control/management of IAS in Uganda.