

**THE ROLE OF GHANA'S NATIONAL PLANT
PROTECTION ORGANIZATION IN
MANAGING INVASIVE ALIEN SPECIES IN
INTERNATIONAL TRADE**

**Plant Protection and Regulatory
Services Directorate**

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The Plant Protection and Regulatory Services Directorate (PPRSD) is the National Plant Protection Organization (NPPO) of Ghana under the International Plant Protection Convention (IPPC) which came into force in 1952. As a signatory to the IPPC, the NPPO of Ghana aims to prevent the spread and introduction of pests of plants and plant products, and to promote appropriate measures for their control

The IPPC definition of a quarantine pest is more or less in **conformity** with the definition of an invasive alien species under the Convention on Biological Diversity as far as plants are concerned since both definitions refer to any organism that is injurious to plants and that has an environmental impact

Invasive alien species have emerged as a topical issue in Ghana as a result of threat they pose to sustainable development in the country. Non-native (alien species) have been introduced both accidentally or intentionally. Many introductions, however, are unintentionally coming into the country with other goods, and the case of marine invasive species, in the ballast water of ships

Even though it is reported that only a small percentage of these alien species will become invasive, when they do their impacts are immense, insidious and usually irreversible, and they may be as damaging to native species and ecosystems as the loss and degradation of habitats.

In Ghana some important ecosystems such as the Volta Basin is colonized by water hyacinth, (*Eichhorhia crassipes*) our forest is being threatened by Siam weed (Chromolaena odorata)and our mangoindustry is being jeopodized by the invasive fruitfly (*Bactrocera invadens*).

The challenge for the NPPO is how to respond to known invasive alien species and new alien species that could potentially become invasive as well as when to prevent their introduction or eradication. A second challenge that is being faced is how to translate policy objectives into effective management practice when species are identified as a threat.

Increased mobility and human interaction through trade, travel and tourism are key drivers in the spread of invasive alien species into Ghana as these have broken down natural barriers of oceans, mountains rivers and deserts which for several thousands of years provided the isolation for unique species and ecosystems to evolve within the country.

Invasive alien species have become a problem in diverse ecosystems in Ghana. They affect both savannahs and tropical forests and they are found on land, in fresh water systems and along the coast in the country. The World Conservation Union (IUCN) identified 26 invasive alien species in Ghana which include following key pests:

Cassava bacterial blight (CBB) - *Xanthomonas*
manihoti

Cassava green mite (CGM) - *Mononychellus*
manihois

Mango mealybug - *Rastracoccus invadens*

Cassava mealy bug - *Phenacoccus*
manihoti

Larger grain borer (LGB) - *Prostephenus*
truncatus

Sigatoka disease - *Mycosphaerella*
fijiensis

Siam weed - *Chromolaena odorata*

Water hyacinth - *Eichornia crassipes*

Invasive fruitfly - *Aleurodicus dispersus*

Charles Talor Ant - *Selonopsis sp.*

These invasive alien species have had a huge adverse effect on the production of major staple food crops such as maize, cassava and plantain and also on the export of mangoes. These have also placed a huge burden on the national plant protection service in containing them with the limited resources available to it

It is therefore important that the Plant Protection and Regulatory Services Directorate plays a major and crucial role in the management n spread of invasive alien species since hey pose a danger to agricultural **development of the country.**

THE PLANT PROTECTION AND REGULATORY SERVICES DIRECTORATE

The Plant Protection and Regulatory Services Directorate (PPRSD) is the national agency assigned the mandate to organize, regulate, implement, monitor and coordinate all plant protection services needed for sustainable agricultural and forestry growth and development and environmental protection (including plants found in natural and semi-natural habitats).

The overall goal of our national plant protection policy is to achieve an efficient system that ensures injury caused to plants by biological, environmental and ecological factors are contained in a sustainable and economical manner.

The PPRSD is recognized as the National Plant Protection Organization of Ghana by the International Plant Protection Convention (IPPC) and as the National Enquiry Point (NEP) for the World Trade Organization (WTO) Sanitary and Phytosanitary (SPS) Agreement. It is therefore well-placed to facilitate international trade in agricultural commodities while preventing or minimizing the spread of invasive alien species which are serious plant pests.

THE ROLE OF THE PLANT PROTECTION AND REGULATORY SERVICES DIRECTORATE IN THE MANAGEMENT OF INVASIVE ALIEN SPECIES

All main pathways for alien harmful organisms affecting plant are regulated and controlled by the Plant Protection and Regulatory Services Directorate in order to minimize the probability of introduction of these organisms.

These pathways are mainly plants (and plant parts), plant products (including wood), wooden packaging and soil. Items not prohibited from import are subjected to inspection at the country's borders on entry. All material intended for planting or for further cultivation have to be accompanied by a phytosanitary certificate that complies with the IPPC model.

This certificate has to be issued by the national plant protection organization of the national plant protection organization of the exporting countries in accordance with Ghana's import regulations. Up to now, all consignments with regulated plants and plant products have not only be checked on the documentary side but also to be inspected physically by the NPPO.

The concept of invasive alien species has considerable implication for phytosanitary regulatory authorities. A clear understanding of alien species on the national territory is essential to help identify species that are invasive, set priorities for research, prevention, monitoring and mitigation and rapidly detect new arrivals not already present in the country or part of the country.

As the national phytosanitary authority we need to assess monitor and manage species that may be invasive and that directly or indirectly affect plants and plant products in accordance with IPPC provisions and national regulations.

It is also important that invasive alien species that are plant pests and are absent from an area (or if present, are of limited distribution and under official control) should be considered quarantine pests and should be subjected to measures according national regulations and internationally acceptable measures.

A multi-stakeholder approach in managing invasive alien species is considered the most effective way.

The NPPO therefore collaborates with all relevant stakeholders which includes environmentalists, researchers, regulators, policymakers, private sector and civil society in managing invasive alien species.

Facilitation of the compilation of a national invasive alien species reference list would assist in effectively managing invasive alien species in international trade corridors and this can best be achieved through effective pest surveillance programme being established by the NPPO.

One other crucial role that, as a phytosanitary authority, we need to play is the establishment of an early detection and rapid response system for invasive alien species and this has to be spearheaded and coordinated by the NPPO.

Since the establishment of the Plant Protection and regulatory Services Directorate in 1965 by the “Prevention of the Introduction of Pests and Diseases of Plants Act, Act 307”, the directorate has carried out important tasks of preventing the introduction of quarantine pests into the country and spread of same to importing countries

Forty-three entry points have been developed for phytosanitary border controls, a national pest surveillance programme has been established and an export-oriented phytosanitary certification and inspection system has been instituted in line with acceptable international guidelines and standards.

The PPRSD is building capacity in the assessment and management of biological risks related to the introduction of organisms especially risks posed by plant pests and invasive alien species that are plant pests. The infrastructure and technical capacity of the phytosanitary authority can be utilized by environmental authorities in efforts to implement the guiding principles of the CBD

Such utilization will have considerable advantages since existing structures and know-how would be used without significant new investments and a duplication of activities would also be prevented.

However, environmentalists need to be mindful of the requirements of the World Trade Organization (WTO) Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement), which aims at preventing countries from establishing arbitrary and unjust trade barriers by having unjustifiable import restrictions.

This means that those plant pests which are also invasive alien species have to comply with the trade-related rules in the SPS Agreement. In this instance, Ghana's import requirements would have to comply not only with IPPC and CBD provisions but also with the basic rules of the SPS Agreement.

These international organizations have official focal or contact points in ministries responsible for agriculture, science and trade. Collaboration and coordination between these focal points is very crucial in managing invasive alien species in international trade.

A clear leadership or appropriate coordination or prevention and mitigation involving all relevant sectors and different levels of government is required but the question is, who leads this process? This is a challenge and a responsibility that the phytosanitary authority needs to tackle.

STRENGTHENING POLICY, LEGAL AND INSTITUTIONAL FRAMEWORKS

In relation to plant pests, there is a policy framework their management. However, the framework is inadequate and incapable of dealing with the specific requirements of the Convention on Biological Diversity (CBD) which was adopted in 1992 and especially Article 8 (h) which requires contracting parties to prevent the introduction of, control or eradicate those alien species which threaten ecosystems, habitats or species.

Management of invasive alien species should not be the responsibility of one state agency; it should involve several relevant ministries, departments, and agencies (MDAs). Accordingly, the framework for invasive alien species management should be multi-sectoral in nature, with a policy and operational coordination.

In the development of an appropriate legal framework for IAS management, updating of existing frameworks to address the subject is the preferred option. An enhancement of the role/functions of the NPPO to deal with IAS management as a whole has much to gain by a developing country like Ghana that faces constraints in the creation new institutions.

Currently, there is no legislation specifically on IAS in Ghana. Various pieces of legislation, however, exist on the statute books to address plant and animal health, and environmental protection. The 192 Constitution, the fundamental law of the land, does not expressly address IAS but some of its provisions are relevant to the subject. Article 36(10) enjoins the state to safeguard the health, safety and welfare of all persons.

This provision, which is of significant relevance within the context of health and safety, is also relevant to this subject of IAS management. A law passed with the object of safeguarding the environment, animal and plant life and health would be perfectly well in accord with this constitutional injunction since many a person in Ghana relies on these as basis of sustenance.

In order to manage FAS effectively and efficiently policy, legal and institutional frameworks must incorporate the following:

a. A clear leadership or appropriate

coordination for IAS prevention and mitigation involving relevant sectors and key stakeholders and by the NPP.

b. Encouraging efficient use of existing structures, procedures and expertise relevant to trade, movement, holding and management of potential IAS (e.g. NPPO, EPA, Customs, Veterinary Services, quarantine services, immigration authorities).

- c. Fully incorporate IAS prevention and mitigation into national legislation and in biodiversity and other relevant policies, strategies and action plans consistent with international law.

- d. Develop specific strategies and action plans to address all aspects of IAS prevention and mitigation.

- e. Support application of key approaches and tools for IAS prevention and mitigation (e.g. EIA, risk analysis, ecosystem approach).
- f. Develop improved criteria, techniques and capacity for their use
- g. Develop voluntary and regulatory measures to enforce prevention policies based on consultation with relevant sectors, industry and other stakeholders.

References

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