



**Summary Paper**  
**VC 1: The Fight Against Fruit Flies in East and Southern Africa**  
**May 25<sup>th</sup> 2010**

## **Introduction**

Five countries took part in the video conference (VC) on May 25<sup>th</sup> 2010 – Ethiopia, Kenya, Mozambique, South Africa and Tanzania. The first section of this short summary paper will introduce the context of the VC and the main issues presented in the issue papers produced by experts on the subject. The second section will consider the current situations and challenges of each country as discussed during the offline national discussions. Section three will consider the future directions to be considered in the fight against fruit flies taken from the VC. Finally, section four will conclude.

## **Context**

Fruit flies are now recognised worldwide as one of the most important threats to the horticulture industry. Not only do they inflict direct damage on fruit but indirectly losses are incurred by quarantine restrictions imposed by importing countries. Although Sub-Saharan Africa has 915 native fruit fly species, the intensification of fruit production means that the continent has become more vulnerable to introductions of alien invasive fruit fly infestations. The frequently referred to species in this VC is *Bactrocera invadens* (*Bi*) which was first detected in 2003 and has led to subsequent banning of exports of potential host species such as mango, avocado and cucurbits from Kenya, Tanzania and Uganda to the Seychelles, Mauritius and South Africa.

Ekesi (2010) identified progress made so far due to numerous wide ranging partnerships including quantification of the impact of and damages caused by the key species; identification of effective attractants, biopesticides and parasitoids for pest suppression; targeted implementation of Integrated Pest Management (IPM); establishment of post harvest treatment parameters; and production of extension materials amongst other things. There are however, significant gaps in national capacity and knowledge banks and also in the overall approach to management of fruit flies in the ESA region particularly. Many strategies have been proposed and were discussed extensively during the VC.

## **Current national situations and challenges**

There was much consensus among the countries during their offline sessions, however, especially in the case of South Africa in comparison to the other countries; there are slightly different areas of focus on the fight against fruit flies. A brief summary of each country's offline deliberations followed by a general summary will be presented in this section.

### *Ethiopia*

Ethiopia has a national plant protection research centre, however, no programme exists that can currently tackle the issues of *Bi*. A national horticultural development strategy is being developed which will focus on the production of fruit of export quality. This may well cause/increase the demand for a national/regional response to fruit flies. Ethiopia has self-categorised its challenges as technical and organisational. Technical challenges include the lack of efficacy, cost and environmental safety of sprays



as well as their practicality. Organisational challenges include the lack of institutional arrangements, limited involvement of the private sector and weak research and extension services with poor linkages with producers. There is also a self-confessed lack of data in regard to spatial and temporal distribution of fruit flies as well as identification of the species involved, their impact on the economy and how best to manage the situation.

### *Kenya*

Five challenges were identified by Kenya; all compounded by the observation that no country has been able to resolve the problem of fruit fly completely. The challenges identified are: the needs for commitment to transparency and sharing of information; a clear strategy and effort to raise awareness; an acceptable code of practice; a sharing of the biodiversity that existing affected countries with native fruit flies have amassed; and an integrated approach.

### *Mozambique*

Mozambique considers that they have plenty of information in regards to horticulture and fruit flies and consider the main challenge they face is the lack of a regional approach to the problem. The private sector is very pragmatic and willing to move fast. It is ready to implement any regionally approved program as long as the regional approach also includes countries that were not participating in the VC (i.e. Burundi, Malawi, Zambia, Zimbabwe).

### *South Africa*

South Africa raised the issue briefly mentioned earlier, of the different angles from which different countries are approaching the fruit fly issue. Their approach is strictly from the point of view of trade as opposed to issues such as food security and poverty alleviation. South Africa considers that its internal needs are being met, but there is a distinct lack of a regional programme. In addition, the present strategy of South Africa is strictly protective, considering that there is no Bi inside the country. Nevertheless, it acknowledges the pressure at its borders and anticipates the pest at home in the coming years. There is an existing PPP in South Africa, which could be used as a model for other countries.

### *Tanzania*

After an initial native fruit fly problem in 1996 in Zanzibar, Tanzania had been able to get the issue under control. However from late 2003 the non-native species have caused problems and are seen to be more aggressive than indigenous species and traditional control methods are proving to be unsuccessful. The issue has also developed from a previously rural-only problem to one seen increasingly in peri-urban areas.

### **Future directions**

Much of the second offline session at the sites was dedicated to discussion of next steps and actions to begin to make an impact on the issue. What follows in this section is a bringing together of the various suggestions – many of which were similar across the five sites/countries.



### *A regional approach*

All of the countries highlighted above all else the need for regional integration. The fruit flies do not respect political boundaries and so approaches cannot be undertaken in isolation although a focus on national priorities is necessary as well as recognition of national actions already taken. Taking this into account there needs to be a mechanism for the exchange of biodiversity such as entomo-pathogenic fungal and bacterial accessions, technology transfer and agreement over protocols.

Tanzania suggested back-to-back bilateral agreements which were set aside due to the complications in managing so many agreements. FAO oversight was suggested but inter-governmental agreements would be needed which are time-consuming to draw up. Ultimately a similar agreement to that of the Year 2000 preparations was suggested, perhaps under the Horticultural Council of Africa (HCA - Tanzania and Kenya) was suggested with a draft convention for governments to approve. This institutional arrangement could be anchored in a Private Public Partnership (PPP) (as seen in Mozambique and South Africa), commercially driven and guided by the HCA with a joint EAC-SADC Secretariat (with membership not limited to member states of the RECs).

Annex 1 from South Africa shows the potential for integration of existing or 'to be established' national and regional programmes. The main points of this mechanism in its aim to integrate national interests and priorities include:

- Widening the issues/drivers that determine research and other activities,
- Using existing trade organisations to set priorities for policies and to solicit funding,
- Proposal Evaluation Committee and national steering committees,
- Role of ICIPE.

### *National approaches*

The establishment of National Taskforces if they do not exist already regularly came up in the discussion. These National Taskforces would define the national strategy framework, coordinate R&D, build national networks and link to possible regional hubs. These national networks would focus on raising awareness of the pest and considering and implementing appropriate control measures targeting rural and urban communities.

With the exception of Mozambique, a need for a greater sense of urgency amongst relevant authorities was expressed which would hopefully bring about deeper support from regional and international bodies. This may also engender increased awareness and interest in the issue from the research and development community.

### *Further research and development needs*

Much discussion focused around the need for Integrated Pest Management (IPM) tools and mobilisation of existing networks of extension workers. These included the use of methods such as toxic baits, monitoring techniques, bio-control, male annihilation, sterile insect technique and post-harvest treatments.



It has been highlighted that a technical package already exists, but is not applied for many reasons independent from R&D partners. In parallel, R&D is still necessary to strengthen, diversify and adapt the technical package.

Issues were voiced time and again over the national capacity of countries in fighting the fruit fly issues, which included succession planning schemes to make sure that current knowledge and skills are passed on and increasing awareness among practitioners are necessary. More participatory R&D approaches should be developed.

### **Conclusion**

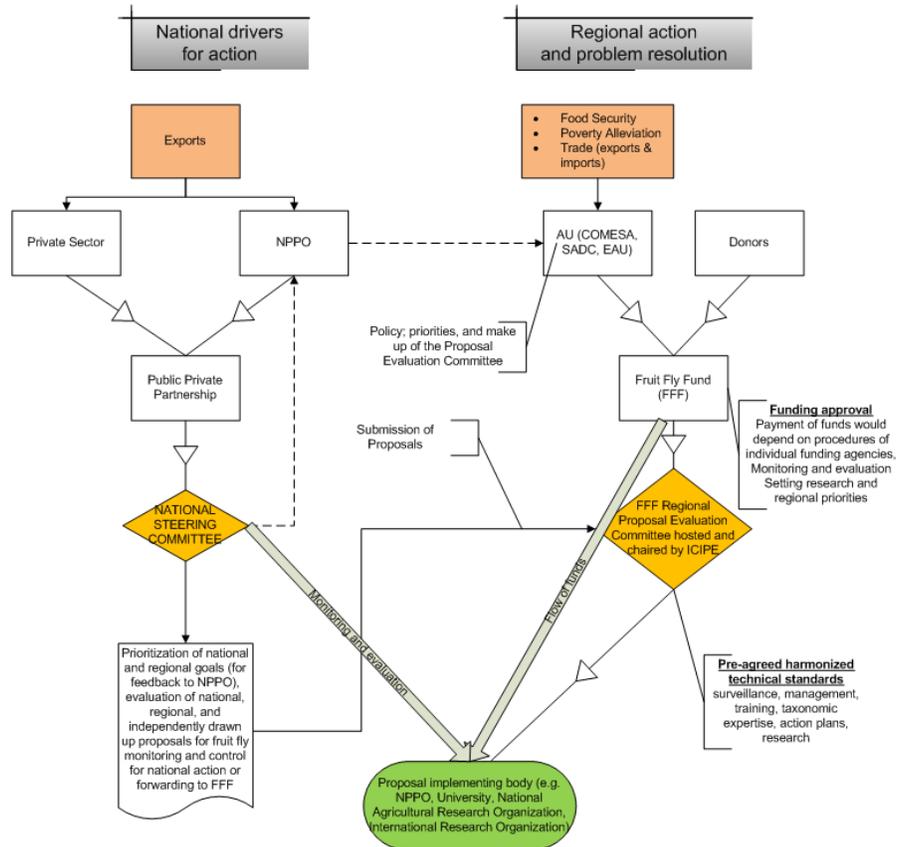
The session was a success although many countries questioned what the follow up to this session would be. The main message from the session was that there was a large lack of regional strategy and collaboration for a truly regional issue. All participants agreed upon the definition of national strategies and taskforces to implement a regional one. And leadership is needed.

### **Bibliography**

- Notes from pre and post video conference discussions: Ethiopia, Kenya, Mozambique, South Africa and Tanzania
- D. Cassidy – Threat and responses to *Bactrocera invadens* in Southern and East African countries exporting to South Africa, May 2010
- S. Ekesi – Combating Fruit Flies in Eastern and Southern Africa (COFESA): Elements of a Strategy and Action Plan for a Regional Cooperation Program, May 2010



**Annex 1 - Integration of existing national and regional programmes for fighting fruit flies**



\*A single national structure is displayed for simplicity.

Source: Notes from the pre and post Video conference discussions held in South Africa



**Annex 2 – Participants in VC 1**

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