



## Prospectus

# FAO Informal Workshop on the Use of Forensic Technologies in Fisheries Monitoring, Control and Surveillance

9-10 December 2009, Rome, Italy

### Background

Illegal, unreported and unregulated (IUU) fishing and related activities are commonly cited as some of the most significant threats to achieving sustainable fisheries. These activities are responsible for severe economic, social and ecological impacts, often on a large scale. A recent study estimated that losses attributable to illegal and unreported fishing may be as high as 10-23 billion USD each year. While IUU operators use many methods to conceal their illegal activities, fraudulent product substitution, and use of false labels and documentation are frequently employed to transport and market products illicitly. These practices are often enabled by a number of factors, such as difficulties in identifying raw or processed fish, its origin, etc and inspecting officials' lack of familiarity with fish products and requirements. As a result, these misidentified products are allowed to pass through control points undetected. These are concerns for industry, governments and consumers.

While a number of diverse tools are available to fight these types of illegal activities, this workshop will focus on currently available technologies based on genetics and chemistry for fish identification and their application to fisheries enforcement. It is recognized that a considerable amount of related, valuable work is ongoing, such as the work on the creation of global DNA databases which serve as reference standards.

FAO is particularly interested in promoting use of available forensic techniques, especially by developing countries, and receiving advice on how this could best be done. A number of countries have successfully used various forensic methods in their investigations and court cases, but many monitoring, control and surveillance (MCS) personnel remain unaware of the existence of these capabilities and how to access them. The outcomes of this meeting are intended to help bridge these gaps.

### Workshop Outcome

To combat IUU fishing and related activity, in particular product substitution and fraud, by promoting available scientific forensic processes and facilities to those involved with fisheries MCS.

### Objectives and expected outcomes

The workshop will bring together a small, global cross-section of specialists, ranging from providers of forensic testing services to the MCS professionals who work on the front line and who are end users of these services. The participants will advise on the prevailing conditions and scientific processes which exist today, such as those involving DNA testing, genetics, and microchemistry analysis which have been or can be applied to issues in MCS work, for example, species identification and origin assignment. In order to promote increased use of forensic services, development of a preliminary inventory of facilities which offer these services should also be considered, if seen as valuable and feasible. It is understood that efforts to develop such an inventory at the workshop would be a first step and might best concentrate on a process, and that the work would not be completed during the session. However participants are urged to gather information on facilities in advance of their arrival at the workshop and to consider how to progress such an inventory in the future.

In addition to identifying the scientific tools which exist and the location of these testing services, FAO is interested in listing the types of situations and investigations which might benefit from these tests to help guide investigators who are unfamiliar with these services.

Workshop participants should contemplate procedures for collecting, labeling and transporting samples, including their preservation and handling and any other matters involved with transport to laboratory facilities, acknowledging both the practical constraints which exist and that diverse legal systems may impose differing standards.

Identification of frameworks and legal considerations such as respecting the chain of custody for evidentiary purposes would also be important.

FAO should also benefit from the experience of MCS practitioners who attend the workshop and who have utilized such techniques in their fisheries investigations. Experts should be ready to share examples of cases where forensic techniques were applied and give an assessment of the experience including how to overcome constraints which were encountered.

Similarly, it is also important to hear from those, especially from developing countries, who could use such services if they knew how to access them and the process, costs, etc involved. Parallel services which may exist in developing countries such as labs for HACCP, food safety and quality assurance should be considered.

The experts should also be prepared to recommend the types of capacity building which could be envisioned at the level of the end user, i.e., the investigator, and to discuss ways to build scientific competencies at national or regional levels.

As a general matter, proposals on ways to promote the existence of these forensic services and likely constraints to the use of these services should also be discussed.

The workshop's output will include a report summarizing the proceedings and making recommendations in the areas outlined above including the identification of future actions to help further the goals of making these forensic services more available.

### **Location, Dates and Language,**

The Informal Workshop on the Use of Forensic Technologies in Fisheries Monitoring, Control and Surveillance will be held at FAO Headquarters in Rome, Italy from 9-10 December 2009. Proceedings will be conducted in English only. The FAO is located at Viale delle Terme di Caracalla adjacent to the Circo Massimo Metro stop on the city's subway system.

### **Participation**

Participants will have geographic diversity and have been invited due to their expertise in fisheries enforcement or forensic techniques applied in fisheries at a national, regional or international level. Practical application of these techniques and the use of these services in investigations of suspected illegal activities are considered significant given the objective of this meeting.