

REPORT

Regional Expert Consultation on Medicinal and Aromatic Plants

13-15 November 2013

Antalya, Turkey

The Regional Expert Consultation on Medicinal and Aromatic Plants (MAP) was held on 13-15 November 2013 in Antalya (Turkey). The meeting was organized by the Sub-regional Office for Central Asia (FAO-SEC) in cooperation with the Regional Office for Europe and Central Asia (REU) of the Food and Agriculture Organization and the Ministry of Food, Agriculture and Livestock of Turkey.

The objective of the workshop was to follow up on the recommendations and issues discussed in the first expert consultation workshop, held in April 2012 in Budapest (Hungary). 35 participants including FAO, Turkey, the SEC and the Eastern Europe experts attended the workshop.

On 12 November 2013, a panel discussion on the future of MAP breeding was organized as a side event during the International Plant Breeding Congress (IPBC). Prof. Dr. Zora Dajic Stevanovic (Serbia) chaired the discussion session. Prof. Dr. Kirill Tkachenko (Russian Federation), Prof. Dr. Kenan Turgut (Akdeniz University, Turkey) and Prof. Dr. Nazim Sekeroglu (Kilis University, Turkey) were the panelists. The objective of the side event was to raise awareness among the Regional Expert Consultation and IPBC participants and discuss with them the future of MAP breeding. The results of the studies on MAP breeding and its future perspectives were shared among participants.

On the first day, the representatives of Turkey presented information on protection and sustainability of natural MAP resources, perfume valley and genetic resources of some essential oil plants in southern Turkey. Under the global situation analysis, the China and Kyrgyzstan MAPs were presented, and the South Eastern Europe's MAP sector, with its treats, challenges and proceedings was reviewed. Sustainable collection strategies, extraction, separation and analysis techniques, and use of a valuable medicinal plant '*Binium persicum*' were discussed. The participants discussed the challenges and opportunities in MAP production and use, considering the SCORENA MAPs network, which is an important platform for MAP experts. The participants stressed the importance of making this web platform more active and undertaking the necessary activities to improve its efficiency. Besides, private companies that attended the workshop presented information on the perspective of industrial MAP processing.

On the second day, the participants were divided into three working groups in order to discuss thoroughly the 'Sustainable production/collection of MAPs in view of the protection of endangered species', 'Feasibility of MAP production/collection and market trends of MAP products' and 'Future activities and the role of stakeholders'. After discussions the groups presented their recommendations on each subject. Regarding the *Sustainable production/collection of MAPs in view of endangered species protection*, the working groups noted the following needs for sustainable wild collection:

- Assess biodiversity/plant resources (development of complex and multidisciplinary methodology based on botanical, ethnobotanical, ecological, eco-physiological and pharmacognostic information) in order to estimate quantities and quality of MAP resources of a particular region. In addition, it would be beneficial to do a socio-economic mapping in order to calculate the available number of collectors, assess their capacities, skills and financial situation for securing their livelihoods;
- Educate and train collectors on sustainable collecting practices;
- Share knowledge and information between collectors and local communities, purchasers/processors, nature conservation and other MAP experts in order to obtain valuable and accurate data on the situation in the field (yield of species, population viability, endangered species, factors affecting plant natural resources), as well as information about current prices, most acknowledged technologies for primary and secondary processing, latest standards and certificates, possibilities for adding value, accessing market, branding and marketing);
- Improve the monitoring of official statistics in MAP sector; the fact is that the data on total quantities collected from the wild are quite approximate (they don't include much of biomass collected for local markets, for own consumption, as well as raw material exported), since custom duties for medicinal plants are not very clear. Therefore, there is a need to assess and develop better standards (may be developed/ initiated by FAO) for statistical recording of wild collection of MAP and NWFPs (where the latter could be conducted in collaboration with forest directories in related ministries);
- Retain and share all information among different professional associations (EUROPAM, AMAPSEEC, AMAPMED, etc.), post on networks and appropriate websites (SCORENA, EcoCrop, WWF, Traffic, etc.);
- Improve national legislation framework as well as laws enforcement in order to ensure sustainable wild collection (for example implementation of quota system, defining Red Lists and issuing Red Books, etc.) Effective punishments should be in force for illegal collection and trade;
- Educate local communities on endangered and especially endemic species in order to raise awareness of necessity to conserve them for a long-time;
- Identify clearly the ministries' responsibilities for MAP. The responsibilities are shared among the ministries of forestry, ministries of agriculture and ministries of environment;
- Apply, possibly, some special export requirements, for example a portion of the total amount collected from the wild can be cultivated on farms, and thus subsidies for cultivating some species should be provided;
- Prepare guidelines for sustainable collection and cultivation of MAP species.

Under the *Feasibility of MAP production/collection and market trends of MAP products*, the working groups agreed on the idea that the MAP sector feasibility strongly depends on market demands, and the market is a major factor which dictates the trends and changes in herbal sector. Since there is a huge diversity in the quality of MAP products on different markets, it is necessary to address the product quality problem. There is a definite need to improve the quality of MAP products originating from particular regions/countries. Primary MAP processing in developing countries is mostly in primitive condition and not adequate, and thus the product quality is very low. Value adding is linked to many steps in wild collection/cultivation/primary and further processing phases. The main goal will be achieving quality standards and having consensus on a minimum desirable product quality. Establishing operational and efficient groups/networks in order to organize collectors and small scale purchasers and improve their product quality can be very advantageous. The standardization of products is a big problem that needs to be addressed. Certification is important and its problems need to be addressed, too. Economically important endemic species need to be cultivated and more seriously considered.

Under the *Future activities and role of stakeholder*, it was agreed that there was a need to identify country initiatives for regional MAP project(s) by contacting national FAO focal points and lobby the government for prioritizing the MAP sector; to issue/publish series of thematic leaflets and/or small monographs/brochures highlighting the most relevant problems of the sector (MAP biodiversity conservation, instructions for primary processing, value adding, technologies for good MAP product, guidelines for sustainable wild collection, best cultivation practices and technologies for target MAPs, etc.). Regarding the ESCORENA MAP, it was suggested that the web site should be improved, and it would be useful if the website was upgraded/reorganized by inserting new columns like business information, markets, prices, products, stakeholders, companies, and links to their web addresses provided. Besides, it is necessary to identify what kind of information should be provided and presented. ESCORENA MAP can be an interactive tool for communicating online (chat rooms/forums) and establishing extension services/consulting systems by connecting to experts that will be able to provide adequate and accurate information to a requester. Besides, the existing guidelines and standards can be uploaded to the web-site (GAP, GACP, Fair Wild, etc.). Furthermore, an expert could be appointed in each sub region in order to collect and assess the provided information, and send it for uploading to the web site.

A technical excursion took place on the third day. The participants visited the MAP trials of the West Mediterranean Agricultural Research Institute and its laboratories. The Institute experts gave information about the MAP activities. A private company, visited during the excursion, gave information more about the industrial processing and marketing of MAP, and the participants had a chance to see and examine how some MAP species are processed.

In general, the expert consultation was very useful and allowed experts to discuss important MAP issues. The workshop brought them together and gave them the opportunity to discuss the problems and needs of MAP sector, explore the cooperation opportunities and identify the ways forward.