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Sustainable Economic Development and Trade Department

Item 4 of the draft agenda of the meeting of senior fisheries officials.

Background Note:

Effective Fisheries Management: Ensuring long-term sustainable use of fisheries resources

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Principles and concepts

1. Effective fisheries management is concerned with a number of SDG 14 Targets including, but not limited to, SDG Target 14.2 (sustainable management of marine and coastal ecosystems), SGG Target 14.4 (effective regulation of harvesting practices) and SDG 14.A (Increase scientific knowledge)

2. According to FAO (2016), the world marine fisheries had 68.5% of fish stocks fished within biologically sustainable levels in 2013. However, an estimated 31.5% of fish stocks classified as overfished present a worrisome situation for fisheries. Overfishing not only cause negative ecological consequences, it also reduces fish production, which further leads to negative social and economic consequences. FAO estimates that rebuilding overfished stocks could increase fishery production by 16.5 million tonnes and annual rent by approximately EUR 30 billion, which would certainly increase the contribution of marine fisheries to the food security, economies and well-being of the coastal communities. For the World Bank (2017), the estimated opportunity cost of mis-management of world fisheries resources is even higher, at EUR 75 billion per year compared to an optimal scenario, including EUR 9.5 billion per year for Africa.

3. According to the FAO Code of Conduct for Responsible Fisheries, the basic principles underpinning fisheries management include the adoption of long-term conservation and sustainable use of fisheries resources through an appropriate policy, legal and institution transparent framework. Relevant conservation and management measures should be based on the best scientific evidence available and be designed to ensure the long-term sustainability of fishery resources at levels which promote the objective of their optimum utilisation and maintain their availability for present and future generations. In the case of transnational fish stocks, straddling fish stocks, highly migratory fish stocks and high seas fish stocks which are exploited by two or more States, States should cooperate to ensure effective conservation through bilateral or multilateral arrangements as appropriate.

Scientific Advice in Support to Fisheries Management

4. A key input for fisheries management is the provision of independent scientific advice on the status of exploited stocks and on the likely impacts of conservation and management measures on stocks status. This implies availability of relevant scientific data and qualified scientific personnel to analyse them and translate the results into clear management recommendations for the consideration of the managing authority. In general, scientific information needed includes time-series of fisheries-dependent data (catches, fishing effort, size composition of catches, discards) and fisheries-independent data (biomass estimates, oceanographic conditions).

5. For highly migratory stocks, scientific advice is produced by the relevant Scientific Committees created under each RFMOs to which all scientific institutes of the contracting parties may participate. Review of scientific reports shows that the status of major tuna species (i.e. skipjack, yellowfin, bigeye, albacore and swordfish) can be assessed with reasonable accuracy, although sometimes with problems stemming incomplete data sets submitted by the parties. However, the status of stocks of neritic tuna species and associated species, which are of interest for coastal fisheries, has

remained largely unknown or uncertain in all three oceans due to insufficient information.

6. For small pelagic stocks and some economically important demersal stocks of fish, crustaceans or cephalopods, FAO regional fisheries organisations may provide assistance to coastal States for the provision of scientific advice. One example is the case of Fishery Committee for the Eastern Central Atlantic (CECAF) which covers the area ranging from Morocco to the North, to RD Congo to the South. The CECAF Scientific Committee groups scientists from the region to analyse data provided by the parties, which include fisheries-dependent data and fisheries independent data (mainly the results of acoustic surveys deployed by regional scientific institutes or by the R/V Fridjoft Nansen under the FAO/Nansen programme). Although of considerable value for coastal States, CECAF provision of scientific advice is hampered by a lack of human and financial resources and by insufficient data submitted by its parties for some stocks, as outlined by the performance review of the organisation published in FAO (2012).

7. In other regions, FAO regional fisheries bodies (e.g. Western Central Atlantic Fishery Commission (WECAF), SWIOFC) until now have not provided recurrent scientific advices on regional stock status not covered by other RFMOs (i.e. tuna and associated species) but they do provide support in relation to harmonisation of scientific data collection programmes of their member countries and methodological guidance for stock assessment.

8. Certain ACP States have been able to apply sufficient resources to obtain scientific information on key stocks from their own research institutes. This involves the availability of a dedicated research institute with sufficient qualified staff and investigation means (i.e. research vessels). However, experiences shows that research institutes have problems to retain qualified scientists and that the acquisition, operation and the maintenance of research vessels requires substantial recurrent financial allocations, which are difficult to sustain without the support of external donors[1].

9. One way to improve the availability of scientific information is the mutualisation of research capacities between coastal States to organise research campaigns and exchanges between scientists of the different participating countries. A good example is an initiative undertaken with the support of the Economic and Monetary Union of West Africa (UEMOA), in which the Guinean and Senegalese research vessels conducted stock assessment campaigns in the EEZ of 9 coastal States between 2012 and 2015[2]. The campaigns have provided valuable information on the abundance of different demersal and coastal pelagic species in the different zones.

Fishing capacity management

10. Management of fishing capacities need to be addressed by fisheries managers. FAO and other organisations including the EU have repeatedly underlined that over-capacity is a significant – if not the primary – reason for overfishing and related socio-economic crises in domestic and global fisheries, and have urged the international community to take relevant measures despite the political sensitivity of the issue. Moreover, in overcapacity situation, fishermen tend to disregard fisheries management rules in a

[1] As an example, the daily cost of operating a research vessels is in the region of EUR 3 500
[2] See http://halieut.agrocampus-ouest.fr/atlas_presh/ (consulted 21 June 2017)

race for scarce fisheries products. A specific International Plan of Action has been adopted in 1999 (IPOA Capacity[3]) to provide guidance to States and International Organisations to resolve this rampant problem.

11. At State level, a first essential step is to assess and monitor fishing capacity. For a number of States, in particular in Africa, a problem can potentially lie in the artisanal fleets which can include several thousands of units with considerable fishing efficiency (e.g. large 24 m canoes utilising gillnets or seines). Under a prevalent open access regime, the number of artisanal vessels can increase dramatically out of State control at levels in excess of the productive capacities of coastal resources and impact not only national fishing communities, but also fishing communities in neighbouring countries. Initiatives have been implemented by some African States *i)* to perform a census of the number of artisanal vessels and *ii)* to include artisanal vessels in a national register and require their marking with the registration number. Senegal and Cabo Verde are good example of recent success stories in this respect. Registration of artisanal vessels conditions the successful application of fishing authorisation regimes.

12. Registration and monitoring of industrial fleets is implemented by most ACP States. Some recent cases suggest that verification of registration data could be improved (capacity measurements, identification of beneficial owners, proof of effective removal from previous register for imported vessels) through increased control and through exchange of information with neighbouring countries and flag States. As supported by FAO, mandatory submission of a Unique Vessel Identifier (UVI) could become a condition for registration and granting of a fishing authorisation. The International Maritime Organization (IMO) Ship Identification Number Scheme is recognised as the best available UVI for fishing vessels. In December 2013, the IMO General Assembly allowed fishing vessels of 100 GT or greater into the scheme on a voluntary basis. In August 2016, through Circular Letter No. 1886/Rev 6, the scheme was further expanded to cover all motorised inboard fishing vessels of less than 100 Gross tonnes (GT) down to a size limit of 12 metres Length Overall (LOA) that are authorised to operate outside of waters under national jurisdiction.

Management plans

13. The FAO Code of Conduct for Responsible Fisheries promotes the elaboration of Fisheries Management Plans as guiding documents underpinning fisheries management over multiannual periods. Fisheries management plans should include *inter alia*:

    - A description of the fisheries concerned, including its current status and users
    - The management objectives (environmental, social, economic), ensuring in particular that a balance between fleet capacity and stock potential is achieved.
    - The measures to reach the objectives, including options
    - Include monitoring & evaluation arrangements, and review clauses

[3] http://www.fao.org/docrep/006/X3170E/X3170E00.HTM (consulted 22 June 2017)

- Depending on circumstances, a plan of action to support the implementation of the management plan with roles and responsibilities of the different agencies involved.

14. According to feedback received from ACP States, most countries elaborated management plans for some of their key fisheries resources (cephalopods, crustaceans, and demersal fish). Recent examples include the management plans adopted in Senegal for deep-sea shrimps and octopus, or management plans adopted for certain fisheries in Madagascar (crabs) and Mauritius (octopus).

15. Concerning shared stocks (stocks occurring within the EEZ of two or more coastal Sates), coastal States must consult each other when setting up management measures for those shared stocks. Concerning highly migratory species, management measures are decided in the multilateral context of RFMOs to which most ACP coastal and flag States are parties.

16. For demersal or small pelagics stocks shared at sub-regional levels, ACP States endeavour to establish regional management plans; examples are the queen conch fisheries and management plan promoted in the Caribbean through WECAF and CRFM, and the joint management of certain resources (sharks, small pelagics or demersal fish stocks) promoted by the SRFC. Feedback from these initiatives indicates that management plans of transnational species are difficult to design and even more difficult to enforce, requiring a formal framework for cooperation and strong political will. In North and West Africa for example, there is still no concerted management plan of the small pelagic stocks over their distribution area despite their considerable socio-economic importance for coastal States and their contribution to food security in Africa.

Participatory process and transparency

Participatory process

17. The FAO Code of Conduct for Responsible Fisheries recommends that States should ensure participation of stakeholders in the fisheries management policy formulation and implementation process with a view to improving the relevance of conservation and management measures and to facilitating their implementation through better appropriation by resource users.

18. Fisheries laws in ACP States contain provisions for the creation of fisheries advisory committees and mandatory submission of Government management initiatives to these committees before adoption. States should ensure provision of adequate resources (for setting them up, training, funding) to these consultative bodies to obtain meaningful stakeholder engagement in policy making.

19. For small-scale fisheries, the participation process of stakeholders in some ACP States goes beyond consultation through empowerment of fishing communities to fulfil certain management functions (i.e. co-management), including participatory surveillance of fishing activities. Co-management initiatives are common practices in countries with high level of artisanal / subsistence fisheries and where the State does not have sufficient resource to perform its management duties over extensive length of coastlines or remote islands (e.g. Africa, Pacific and Caribbean Islands). Similarly,

fishing communities involved in co-management concerned must receive sufficient resources (*e.g.* training, funding, equipment) to deliver their duties.

Transparency

20. A number of international instruments including UNCLOS or the FAO Code of Conduct for Responsible Fisheries have put forward the need for governments to share information on fisheries. However, basic information still often remains out of the public domain. Such information includes the status of fish stocks and marine ecosystems, conditions attached to fishing authorisations, the details of fishing access agreements signed between coastal states and fishing entities (including foreign ones) or simply the amount of catch taken. Revenues from access fees and expenditures for fisheries management should be transparently accounted in State budgets. Without such information, the quality and credibility of decision-making can be undermined, while the prospect of effective Government accountability diminishes.

21. Several initiatives have been implemented to support increased transparency of fisheries management frameworks. This include the transparency clause promoted under EU fishing agreements, RFMOs resolutions for sharing of information on access agreements, the development of a regional dashboard under the World Bank funded WARFP programme and the development of the global multi-stakeholder Fisheries Transparency Initiative (FiTI).

22. Fishing companies also promote transparency as exemplified by the Tuna Transparency Initiative launched by EU operators of the tuna industry with a voluntary commitment to have a 100% independent observer coverage, well in excess of the 5% coverage mandated by RFMOs (except WCPFC where 100% coverage is required). According to the participating fishing companies, transparency efforts need to be supported by coastal States in particular through the provision of trained independent scientific observers.

23. Key conclusions for the consideration by ACP Fisheries Ministers

- For stocks evaluated by RFMOs or Regional Fisheries bodies, ACP States should ensure that scientific data needed by the dedicated scientific working groups to carry out their work are adequately and timely provided, noting that in the case of RFMOs, timely submission of scientific data is a binding obligation that must be complied with.

- For their own stocks or for stocks shared with neighbouring countries, ACP States should engage in regional cooperation to mutualise scientific research resources including research vessels or scientific personnel.

- Management of fishing capacity is pivotal to implement sound fisheries management. ACP States should deploy efforts to manage capacity of their domestic fleets in line with stock availability, including when needed, their small-scale fleets. Depending on the context, ACP States should consider shifting away from open access policies. In this latter case, registration of small-scale vessels is a necessary step underpinning implementation of fishing authorisation mechanisms. Concerning industrial vessels,

whether domestic or foreign, submission of a verified Ship Identification Number (IMO) number should be considered as a condition for granting fishing authorisations.

- ACP States should design and implement long-term management plans for their key resources with the aim of inter alia maintaining high productivity of the stocks and for overexploited stocks taking actions that lead to recovery of the fish stocks at the shortest time possible. For stocks shared between several coastal States, management plans should be developed in cooperation between the concerned States. Measures contained in management plans should be implemented as foreseen, and management plans implemented subject to regular interim evaluations to verify their relevance and their effectiveness.

- As recommended by the FAO Code for Responsible Fishing, stakeholders should be consulted to ensure their participation and contribution in fisheries management decision-making process. While most ACP States have implemented in their laws mandatory provisions for consultations, ACP States should ensure that consultative bodies have adequate human and financial resources to deliver meaningful contributions.

- ACP States should make all efforts to ensure transparency that support quality and credibility of decision-making. Key verified information and indicators on fisheries should be made available to the public and any third parties by appropriate means

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