联合国粮食及农业组织 | Food and Agriculture Organization of the United Nations | Organisation des Nations Unies pour l'alimentation et l'agriculture | Продовольственная и сельскохозяйственная организация Объединенных Наций | Organización de las Naciones Unidas para la Alimentación y la Agricultura | منظمة الأغذية والزراعة للأمم المتحدة

COMMISSION ON GENETIC RESOURCES FOR FOOD AND AGRICULTURE

INTERGOVERNMENTAL TECHNICAL WORKING GROUP ON AQUATIC GENETIC RESOURCES FOR FOOD AND AGRICULTURE

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DRAFT PROCESS INDICATOR QUESTIONNAIRE FOR MONITORING THE IMPLEMENTATION OF THE GLOBAL PLAN OF ACTION FOR THE CONSERVATION, SUSTAINABLE USE AND DEVELOPMENT OF AQUATIC GENETIC RESOURCES FOR FOOD AND AGRICULTURE

Monitoring the status of aquatic genetic resources for food and agriculture (AqGR) and the status of implementation of the Global Plan of Action for the Conservation, Sustainable Use and Development of the Aquatic Genetic Resources for Food and Agriculture (Global Plan of Action) are key priorities, including of the Global Plan of Action itself.

For the purpose of monitoring the status of AqGR and the status of implementation of the Global Plan of Action, a dual monitoring system, has been developed, which is based on resource indicators and process indicators.

Through their National Focal Points, countries report on resource indicators directly through AquaGRIS. It is suggested that National Focal Points for AqGR report in a separate process on AqGR management activities taken by countries to implement the Global Plan of Action. For this process a draft questionnaire targeting the process indicators has been developed and is attached to this document.

Detailed information on the process for the development of the questionnaire is provided in documents **CGRFA/WG-AqGR-5/24/5** and the indicators are provided in **CGRFA/WG-AqGR-5/24/5/Inf.1**.

Once finalized, the questionnaire will be circulated to National Focal Points every five years. The questions are listed by priority area of the Global Plan of Action and the numbers provided correspond to the number of the associated process indicator.

DRAFT PROCESS INDICATOR QUESTIONNAIRE FOR MONITORING THE IMPLEMENTATION OF THE GLOBAL PLAN OF ACTION FOR THE CONSERVATION, SUSTAINABLE USE AND DEVELOPMENT OF AQUATIC GENETIC RESOURCES FOR FOOD AND AGRICULTURE

Priority Area 1: Inventory, characterization and monitoring

Long term goal

Information on aquatic genetic resources for food and agriculture (AqGR) made accessible for and usable by Members and stakeholders via a detailed, institutionalized and sustainably resourced global information system utilizing standardized terminology.

Process indicator P1.SP3.P1. Extent of development of national registries of AqGR

1. Does your country have a national registry of its AqGR within or outside of FAO's AquaGRIS?

- Yes, it has a full registry of all cultured species
- Yes, it has a partial registry of cultured species
- A national registry is under development
- No, but development of a national registry is planned and resources have been identified
- No, but development of a national registry is planned and resources are being sought
- No, no registry exists or is planned

Follow-up questions

If the answer is one of the first five options above

1.1 If your country has, or is planning to create a national registry of AqGR, has this been developed or will this be developed using FAO's global information system AquaGRIS?

A. Yes
B. No

1.2 If your answer is B (No) and the registry is created using an information system other than AquaGRIS, please provide further details including the types of information recorded, the main purpose of the registry, whether the data are validated and by whom or what agency, and who can access the information in the registry.

Priority Area 2: Conservation and sustainable use of AqGR

Long-term goal

AqGR, including native and non-native species, their farmed types and wild relatives, are conserved and sustainably used for the benefit of aquaculture, culture-based fisheries, commercial and recreational fisheries, and sustainable ecosystems.

Process indicator P2.H2. Extent of species with genetic management applied

2. Is genetic management (i.e. management of genetic diversity) considered in the seed supply systems for the major cultured species in your country (H2a)?[1]

- Yes, management of genetic diversity[2] is considered in **most** of the seed supply for the major cultured species
- Yes, management of genetic diversity is considered in **some** of the seed supply for the major cultured species
- Management of genetic diversity is considered in a small proportion of the seed supply for the major cultured species
- No, there is no consideration of management of genetic diversity in the seed supply for major cultured species.

2.1 Please list the species, in your country, for which genetic diversity is considered and managed within **most or some** of the seed supply systems for aquaculture.

Species	Details on the genetic management plan (s)[3]

3 Is genetic management (i.e. management of genetic diversity) considered in the management of wild stocks of cultured species in your country (H2b)?

- Yes, genetic diversity[4] is considered in the management of most species
- Yes, genetic diversity is considered in the management of some species
- Genetic diversity is considered in the management of one or two species
- No, there is no consideration of management of genetic diversity in wild stocks of species

Please list the cultured species in your country, for which genetic diversity is considered in the management of wild stocks.

Species/genetic stocks	Details on the stock management programme (s)

[1] For this type of question 'most' means over 50 percent whilst some means 20-50 percent.
[2] Provide a definition of management of genetic diversity, basically some management of Ne to ensure genetic diversity is conserved from one generation to the next.
[3] Provide some guidance on what kind of detail to include in this column.
[4] Provide a definition of management of genetic diversity, basically some management of Ne to ensure genetic diversity is conserved from one generation to the next.

Process indicator P2.SP1.P1. Extent of species with regular monitoring of the stock status[5] of wild stocks

4 Does your country conduct regular monitoring of the stock status of wild stocks of aquaculture species?

- Yes, monitoring of stock status is carried out for most species
- Yes, monitoring of stock status is carried out for some species
- Monitoring of stock status is carried out for one or two species
- No, there is no monitoring of stock status of species

4.1 Please list the species for which monitoring of the status of wild stocks is carried out.

Species/genetic stocks	Native or non-native	Type of monitoring carried out[6]	Approximate frequency of monitoring

Process indicator P2.SP1.P2. Extent of species with monitoring Error! Bookmark not defined. **of the genetic status[7] of wild stocks**

5. Does your country conduct regular monitoring of the genetic status of wild stocks of aquaculture species?

- Yes, monitoring of genetic diversity[8] is used in the management of most species/genetic stocks
- Yes, monitoring of genetic diversity is used in the management of some species/genetic stocks
- Monitoring of genetic diversity is used in the management of one or two species/genetic stocks
- No, there is no monitoring of genetic diversity in wild stocks of species

5.1 Please list the species for which monitoring of the genetic status of wild stocks is carried out.

Species/genetic stocks	Native or non-native	Type of monitoring carried out[6]	Approximate frequency of monitoring

[5] Stock status would be the result of any kind of assessment of the size and health of a stock such as whether it is overfished or in decline.
[6] Monitoring approaches to be provided.
[7] The genetic status would include assessment of the genetic diversity and/or relatedness but also measures such as effective population size.
[8] Provide a definition of management of genetic diversity, basically some management of Ne to ensure genetic diversity is conserved from one generation to the next.

Process indicator P2.SP3.P1. Extent that monitoring and assessment of wild stocks of AqGR (including fisheries management plans, aquatic protected areas, and ecosystem-based management plans) specifically target management and conservation of AqGR

6. What proportion of monitoring, assessment. and management plans for wild stocks of AqGR explicitly consider or target management and conservation of AqGR?

    - Most plans consider management and conservation of AqGR
    - Some plans consider management and conservation of AqGR
    - One or two plans consider management and conservation of AqGR
    - Plans do not consider management or conservation of AqGR

Process indicators P2.SP5.P1 Extent of species with monitoring[Error! Bookmark not defined.] **of genetic status**[7]

7. Does your country conduct regular monitoring of the genetic status of major farmed types of aquaculture species?

    - Yes, monitoring of genetic diversity is used in the management of most farmed types of major cultured species
    - Yes, monitoring of genetic diversity is used in the management of some farmed types of major cultured species
    - Monitoring of genetic diversity is used in the management of one or two farmed types of major cultured species
    - No, there is no monitoring of genetic diversity of farmed types of major cultured species

7.1 Please list the species/farmed types for which monitoring of the genetic status of farmed types is carried out.

Species/farmed types	Native or non-native	Type of monitoring carried out[6]

Process indicator P2.SP6.P1 Extent of risk management plans taking into account the exchange of AqGR

8. Does your country require risk assessments prior to the introduction of new species for aquaculture?

    - Yes, a risk assessment is required prior to all introductions
    - Yes, a risk assessment is required prior to all introductions, but not always carried out
    - Yes, a risk assessment is required, but often not carried out
    - No, no risk assessment is required prior to new introductions

8.1 Please estimate the proportion of introductions of new species (for aquaculture purposes) into your country in the past five years that have been subjected to risk assessment.

XX %

8.2 If a species has already been introduced into your country are risk assessments still required for subsequent introductions of the same species?

- Yes
- Sometimes
- No

Process indicator P2.SP6.P2 Extent of mitigation of invasive AqGR

9. Does your country specifically identify some non-native species as "invasive"?

- Yes
- No

9.1 Does your country take measures to control invasive species that were originally introduced for aquaculture?

- Yes
- No

9.2 If yes, please list the invasive species that are subject to such measures and briefly describe the measures.

Invasive species	Mitigation measure	Information source

Priority Area 3: Development of AqGR for aquaculture

Long-term goal

Increased adoption of demand-driven genetic improvement programmes enhancing the efficiency and sustainability of aquaculture production and delivering benefits to consumers, broader society, and the environment.

Process indicator P3.SP2.P1. The extent of national and regional strategies[9] including development of AqGR.

10. Does your country have a national strategy that includes the sustainable development (i.e. genetic improvement) of AqGR in aquaculture?

- Yes
- No, but a strategy is under development
- No

10.1 Does your country participate in any regional[9] strategy for the sustainable development of any AqGR in aquaculture?

If yes, please briefly describe the regional strategies in which your country participates.

Species	Countries/region involved	Brief description of the strategy

Process indicator P3.SP3.P1. Extent of stakeholder capacity in aquaculture genetic management and improvement.

11. Does your country have adequate human resource capacity to support the development of well managed breeding programmes for key aquaculture species?

- Yes, there is adequate capacity in the country
- The country has some capacity but it is not sufficient to meet the needs of current and planned breeding programmes
- The country has very limited capacity to support breeding programmes
- The country has no such capacity

11.1 Have aquaculture stakeholders completed FAO's training in AqGR management and genetic improvement?

- Yes (please provide the number of trainees completing the course - available from FAO)
- No

Priority Area 4: Policies, institutions and capacity building

Long-term goal:

Capacity to support sustainable and efficient implementation of AqGR policy that takes into consideration environmental and economic dimensions enhanced through dedicated institutions.

[9] A regional strategy would include several, usually neighbouring, countries and maybe be driven by a regional organization.

Process indicator P4.H1. Extent of countries that have a designated dedicated authority for the development and implementation of the AqGR related policy and legislation.

12. Does your country have a designated dedicated authority for the implementation of policies and strategies on the management of AqGR?
    - Yes, an authority was designated *before* the adoption of the GPA
    - Yes, an authority was designated *after* the adoption of the GPA
    - No, but the designation of an authority is under preparation
    - No

12.1 Please provide further details. If more than one authority is involved in different aspects of AqGR policy and management, please indicate the relevant authorities in the table below.

	AqGR management activities covered by the designated authority				
Designated authority	Collection of data and monitoring	Conservation on AqGR	Sustainable use and development of AqGR	Policy development and implementation	Seed supply monitoring and certification

Process indicator P4.SP1.P1. Extent of countries with national policies or strategy relating to conservation, sustainable use and development for AqGR

13. Does your country have national policies that explicitly reference AqGR?

    - Yes
    - No, but a policy is currently under development
    - No

If yes, please briefly summarise the policies that reference AqGR.

13.1 Does your country have a national strategy that covers the conservation, sustainable use and development of AqGR?

    - Yes
    - No, but a strategy is actively under development
    - No

If yes, please briefly summarise the strategy that references AqGR.

Process indicator P4.SP2.P1. Extent of countries/regions with networks on AqGR.

14. Does your country have a national network to support and enhance communication among stakeholders in AqGR?

- Yes
- No

If yes, please briefly describe the network on networks.

14.1 Is your country a member of one or more regional or global network(s) supporting and enhancing communication on AqGR?

- Yes
- No

If yes, please briefly describe the network(s) in which the country participates.

Process indicator P4.SP3.P1. Extent of countries with national legislations covering the management of AqGR.

15. Does your country have national legislation that explicitly considers the conservation, sustainable use and development of AqGR?

- Yes
- No, but legislation is currently under development
- No

If yes, please briefly summarise the legislation covering AqGR.

15.1 If your country has such legislation in place is compliance monitored?

- Yes
- No

Please provide further as to the monitoring of compliance scheme.

Process indicator P4.SP4.P1. Extent of integration of international and regional agreements/instruments into national policies and/or strategies on AqGR

16. Please list relevant international and regional agreements and instruments that your country integrated into national strategies, policies and legislations on AqGR.

International instrument/agreement ratified or joined by country.[10]	Integrated into strategies, policies, or legislations (Yes/No)	Main national policies, strategy or legislation into which instrument is integrated
Global Plan of Action		
Convention on Biological Diversity		
Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization		
Cartagena Protocol on Biosafety		
Convention on International Trade in Endangered Species of Wild Fauna and Flora		
Others (please provide details):		

Process indicator P4.SP5.P1. Extent of countries with national institutions including National Focal Points, established or strengthened.

17. Does your country have national institution(s) with responsibility for monitoring the status of AqGR?

- Yes.
- No, but the designation of an authority (or authorities) is under preparation
- No

17.1 Does your country have a current FAO National Focal Point for AqGR?

- Yes
- No

[10] Include only those instruments which your country has ratified or joined

Process indictor P4.SP6.P1. Extent of countries/regions with institutions for characterization, inventory and monitoring of AqGR, intersectoral coordination, education and research

18. Number of (state/federal) institutions active[11] in conducting research on characterization, management, and/or genetic improvement of AqGR.

XX institutions

18.1 This research capacity to support AqGR characterization, management and/or genetic improvement is considered:

- Strong
- Moderate
- Weak
- Absent

19. Number of institutions (state/federal) active[12] in conducting training[13] on the characterization, management, and/or genetic improvement specific to AqGR.

XX institutions

19.1 Is this education and training capacity to support AqGR characterization management and improvement considered:

- Strong
- Moderate
- Weak
- Absent

20. Number of private sector organizations dealing with **characterization, inventory. monitoring of AqGR, intersectoral coordination, education and/or research**

XX private sector organizations

[11] An active institute would be one which has been implementing one or more related projects/programmes within the last 3 years.
[12] An active institute would be one which has been implementing one or more related education programmes within the last 3 years.
[13] Training would include undergraduate, post graduate and vocational programmes.

Process indicator P4.SP7.P1 Existence of legislative, administrative or policy measures on access and benefit-sharing, developed in consultation with (i) stakeholders using AqGR and associated traditional knowledge for research and development and (ii) Indigenous Peoples and local communities

21. Does your country have legislative, administrative or policy measures on access and benefit-sharing for AqGR?

- Yes, policy, administrative and legislative measures for ABS of AqGR are in place
- Policy, administrative and legislative measures for ABS of AqGR are under development
- No, there are no policy, administrative or legislative measures governing ABS of AqGR

Please provide further details on related existing measures if your answer is “a” or “b”.

21.1. Were existing policy, administrative and legislative measures developed in consultation with stakeholders using AqGR?

- Yes
- No

Please provide further details on related existing measures.

21.2 Was traditional knowledge of indigenous people and local communities considered in the development of existing policy, administrative and legislative measures?

- Yes
- No

Please provide further details on related existing measures.

21.3 Were existing policy, administrative and legislative measures developed in consultation with indigenous people and local communities?

- Yes
- No

Please provide further details on related existing measures.

ON THE IMPLEMENTATION AND FINANCING OF THE GLOBAL PLAN OF ACTION FOR AQUATIC GENETIC RESOURCES

22. Has your country taken action towards the implementation of the FAO *Global Plan of Action for the Conservation, Sustainable Use and Development of Aquatic Genetic Resources for Food and Agriculture*?

- Yes,
- Not yet, but action is planned
- No

Please provide further details on actions taken for each priority area of the Global Plan of Action.

Priority Area	Actions taken
Inventory, characterization and monitoring	
Conservation and sustainable use of AqGR	
Development of AqGR for aquaculture	
Policies, institutions, capacity building	

23. Is there any funding applied to the implementation of the GPA on AqGR in your country?

- Yes, international and national funding has been secured to support implementation
- Yes, international funding has been secured to support implementation
- Yes, national funding has been applied to support implementation
- No funding is yet secured for implementation, but it is planned
- No funding is available or planned