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Food and Agriculture  
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**The International Treaty**  
ON PLANT GENETIC RESOURCES  
FOR FOOD AND AGRICULTURE

**INTERNATIONAL TREATY ON PLANT GENETIC RESOURCES FOR  
FOOD AND AGRICULTURE**

**ELEVENTH MEETING OF THE *AD HOC* ADVISORY COMMITTEE  
ON THE FUNDING STRATEGY AND RESOURCE MOBILIZATION**

**Rome, Italy, 8 – 10 May 2019**

**APPENDIX II: SUMMARY OF THE METHODOLOGY FOR TARGET  
SETTING**

This document contains a summary of the methodology developed for setting the targets of the draft updated Funding Strategy and the Benefit-sharing Fund.

This summary could be considered for inclusion in a third Appendix to the updated Funding Strategy: *Summary of the Methodology for Target Setting*.

The full text of the methodology is provided in the document, IT/GB-8/ACFSRM-11/19/5, *Funding Strategy Target Setting: Cost-based Methodology*.

## Summary of the Methodology for Target Setting

This document summarizes the methodologies that have been used in the process of identifying the targets of the International Treaty's Funding Strategy and Benefit Sharing fund.

The methodologies have been further revised based on the methodology options presented to the Committee on the Funding Strategy and Resource Mobilization at its tenth meeting, and the subsequent recommendations it made.

A "cost-based" methodology has been used for the overall target of the Funding Strategy and Benefit-sharing Fund. For the latter, a "needs-based" modular approach was combined with a "supply-based" methodology as recommended by the Committee.

Several estimates have recently been carried out on global financing needs of relevance to the conservation and sustainable use of PGRFA, and that cover or include at least some of the areas set out in the Results Framework of the Funding Strategy. They generally yielded a similar magnitude of resources, even if not directly comparable. Of particular note, FAO (2015) indicated that US\$ 977 million per year in additional rural investment in developing areas would be required for activities related to "*Preservation/improvement of crop genetic resources*" for sustainably ending hunger by 2030.

The establishment of the Funding Strategy target, as indicated in Article 18 of the International Treaty, should take into account the Global Plan of Action (GPA) for PGRFA. The "Cost-Based" methodology for the overall Funding Strategy target first estimates the current level of resources invested globally by different sources that are contributing to the implementation of the International Treaty. Then, the financial gap between the current level of resources and what is needed to ensure the implementation of the Second Global Plan of Action is calculated. Specifically, the average annual cost over a five-year period is estimated for the implementation at a global level of the 18 priority activities of the Second GPA. The overall Funding Strategy target is calculated by summing up the current flow of resources addressing the International Treaty and the financial gap.

An approximate figure of the current global investments in the areas under of the Treaty has been calculated at **12 - 14 US\$ billion per year**. This estimate assumes no double-counting of funds and no under-reporting of bilateral funding and aid assistance. It does not include the important contribution of farmers to the use, development, and maintenance of genetic resources in natural settings.

Once the estimated current flow of resources was calculated, the distance between the "*actual level*" and the "*desired level*" of implementation of the Second Plan of Action (as indicated by the Second GPA monitoring framework) constitutes the financial gap to close in the next five years.

Based on preliminary estimates discussed with PGRFA experts through an informal consultation, different scenarios, merely for illustrative purposes, have been developed, that consider a range of desired levels of implementation of the Second GPA (Table 1).

Scenario	Desired level of implementation	Current level of resources invested (2017 US\$ Billion)	Target (2017 US\$ Billion)	Gap (5 years) (2017 US\$ Billion)	Gap (5 years, Per year) (2017 US\$ Billion)	Multilateral and bilateral source (per year US\$ Billion)
1	Medium -	[12-14]	[15-18] (5 years target)	[3.05-3.56]	[0.61-0.71]	[0.14-0.16]
2	Medium +	[12-14]	[18-22] (5 years target)	[6.7-7.8]	[1.3-1.6]	[0.31-0.36]
3	High +	[12-14]	[26-31] (10 years target)	[7.1-8.3]	[1.4-1.7]	[0.33-0.38]

**Table 1.** Overall funding targets associated with different scenarios.

The operational steps for target identification as well as their assumptions and limitations are carefully described of the full methodology document. Briefly, the main limitation of the methodology is the need to estimate some of the key parameters of the current flow of resources within the areas and programmes of the Treaty. The availability of more data, especially concerning the national level funding, and other validation exercises may overcome this limitation in the future.

Once the costs to meet the needs for implementation of the Second Global Plan of Action have been estimated, the target for the BSF can be identified following an integrated approach that employs in parallel and in a synergistic way two methodologies:

- a) Needs-based approach;
- b) Supply-based methodology.

The needs-based approach identifies the needs (cost estimates) required for carrying out a selection of activities within the Second GPA priorities and quantifies the specific contribution of the BSF to the overall funding strategy target of the Treaty. The supply-based methodology reflects the cost estimates coming from the needs-based approach on the current funding environment and its future trends, ensuring realism of the target and identifying potential funding sources. The integrated use of the two approaches will provide scenarios characterized by a different level of ambitions (costs estimates) of the contribution that the BSF could make to the overall funding strategy target of the Treaty, and its reflections on the funding trends.

The needs-based approach uses the same costs of the activities and the financial gap of each priority as identified by the “the Cost-Based” methodology for the overall funding strategy target setting process. Given the BSF’s relative contribution and its associated cost, the supply-based methodology will provide a reflection of the costs on the potential funding landscape and trends. Funding landscape will be identified in terms of:

- A Voluntary contribution to the BSF over the past five years (and its expected change in the future, expressed in percentage changes);

- **B** Realistic contributions from users and of anticipated user-based payments.
- **C** Additional voluntary contributions from enabling partners, including the food processing industry.

While future trends on **A** and **B** can be projected with a certain degree of uncertainty, **C** represents novel funding sources and its quantification in possible scenario's development will be expressed as a percentage share of the total resources mobilized by **A** and **B**.

By combining the two methodologies the trade-off between the ambition of the future BSF role in contributing to the overall Funding strategy target and the amount of resources to be mobilized in order to fully achieve the goal is well identified.

Possible scenarios are illustrated in Table 2. Contribution to the Second GPA implementation can include the same priority activities considered by the previous strategic plan of the Treaty (i.e scenarios 1-3), or a specific sub-selection of priorities as scenarios 4-6 illustrates. More in detail, scenarios 1-3 consider the contribution of the BSF in relation to seven priority activities, considering a “**Medium** –“level of implementation of the Second GPA as target; differently, scenarios 4-6 focuses on two specific priority activities but aiming to a higher level of implementation (**Medium +**) of the Second GPA. Scenarios 1 and 4 include also the consequence on the funding landscape, assuming the user-based payments the only possible resource for achieving the BSF target (**only B**).

For both targets, the scenarios definition, the identification of the priority activities as well the quantification of the BSF contribution to the overall Funding strategy target, remain an exclusive prerogative of the Committee. To this end, an EXCEL tool has been developed to facilitate the Committee's decision-making process.

Possible Scenarios	Contribution to the overall Funding Strategy target and its costs (Target for the overall funding strategy considers here a “ <b>Medium</b> –“ level of second GPA implementation).	Resources to be mobilized (Supply-based approach), per year)
1	<b>15% of the bilateral - multilateral additional effort for the Priorities: P2.</b> Supporting on-farm management and improvement of plant genetic resources for food and agriculture; <b>P8.</b> Expanding the characterization, evaluation and further development of specific collection sub-sets to facilitate use; <b>P9.</b> Supporting plant breeding, genetic enhancement, and base-broadening efforts; <b>P11.</b> Promoting development and commercialization of all varieties, primarily farmers' varieties/landraces and underutilized species; <b>P13.</b> Building and strengthening national programmes; <b>P17.</b> Building and strengthening human resource capacity. - <b>11-13 US\$ millions per year, for the next 5 years</b>	<p><b>A</b> (Voluntary contributions) <b>4-5 US\$ millions</b> (required increase in five years: 0%; +25%)</p> <p><b>B</b> (User-based payments) <b>2 -3 US\$ millions</b> (lower bound of the estimate range)</p> <p><b>C</b> (Add. voluntary contributions) <b>2-3 US\$ millions</b> (30-40% of A+B)</p> <p style="text-align: center;"><i>Or</i></p> <p><b>Only B</b> (User-based payments) <b>11-13 US\$ millions</b> (medium - upper bound of the estimate range)</p>
2	<b>25% of the bilateral - multilateral additional effort for the Priorities: P2.</b> Supporting on-farm management and improvement of plant genetic resources for food and agriculture; <b>P8.</b> Expanding the characterization, evaluation and further development of specific collection sub-sets to facilitate use; <b>P9.</b> Supporting plant breeding, genetic enhancement, and base-broadening	<p><b>A</b> (Voluntary contributions) <b>6-8 \$ millions</b> (required increase in five years: +50% +100%)</p> <p><b>B</b> (User-based payments)</p>

	efforts; <b>P11.</b> Promoting development and commercialization of all varieties, primarily farmers' varieties/landraces and underutilized species; <b>P13.</b> Building and strengthening national programmes; <b>P17.</b> Building and strengthening human resource capacity. - <b>18-21 US\$ millions per year, for the next 5 years</b>	<b>5-6 US\$ millions</b> (middle point of the estimate range)  <b>C (Add. voluntary contributions) 5-8 US\$ millions</b> (40-60% of A+B)
3	<b>50% of the bilateral – multilateral additional effort for the Priorities: P2.</b> Supporting on-farm management and improvement of plant genetic resources for food and agriculture; <b>P8.</b> Expanding the characterization, evaluation and further development of specific collection sub-sets to facilitate use; <b>P9.</b> Supporting plant breeding, genetic enhancement, and base-broadening efforts; <b>P11.</b> Promoting development and commercialization of all varieties, primarily farmers' varieties/landraces and underutilized species; <b>P13.</b> Building and strengthening national programmes; <b>P17.</b> Building and strengthening human resource capacity. - <b>36-42US\$ million, per year, for the next 5 years</b>	<b>A (Voluntary contributions) 10-12 \$ millions</b> (required increase in five years: +150% +200%)  <b>B (User-based payments) 12-14 US\$ millions</b> (upper bound of the estimate range)  <b>C (Add. voluntary contributions) 15-24 US\$ millions</b> (70-80% of A+B)
Possible Scenarios	Contribution to the overall Funding Strategy target and its costs (Target for the overall funding strategy considers here a “ <b>Medium +</b> ” level of second GPA implementation).	Resources to be mobilized (Supply-based approach), per year)
4	<b>30% of the bilateral - multilateral additional effort for the Priorities: P2.</b> Supporting on-farm management and improvement of plant genetic resources for food and agriculture <b>P11.</b> Promoting development and commercialization of all varieties, primarily farmers' varieties/landraces and underutilized species.  <b>9-10\$ million, per year, for the next 5 years</b>	<b>A (Voluntary contributions) 4-5 US\$ millions</b> (required increase in five years: 0%; +25%)  <b>B (User-based payments) 2 -3 US\$ millions</b> (lower bound of the estimate range)  <b>C (Add. voluntary contributions) 2-3 US\$ millions</b> (30-40% of A+B)  <i>Or</i>  <b>Only B (User-based payments) 9-10 US\$ millions</b> (medium - upper bound of the estimate range)
5	<b>60% of the bilateral - multilateral additional effort for the Priorities: P2.</b> Supporting on-farm management and improvement of plant genetic resources for food and agriculture <b>P11.</b> Promoting development and commercialization of all varieties, primarily farmers' varieties/landraces and underutilized species  <b>18-22US\$ million, per year, for the next 5 years</b>	<b>A (Voluntary contributions) 6-8 \$ millions</b> (required increase in five years: +50% +100%)  <b>B (User-based payments) 5-6 US\$ millions</b> (middle point of the estimate range)  <b>C (Add. voluntary contributions) 5-8 US\$ millions</b> (45-55% of A+B)
6	<b>90% of the bilateral - multilateral additional effort for the Priorities: P2.</b> Supporting on-farm management and improvement of plant genetic resources for food and agriculture; <b>P11.</b> Promoting development and	<b>A (Voluntary contributions) 8-9 \$ millions</b> (required increase in five years: +100%; +125%)

	<p>commercialization of all varieties, primarily farmers' varieties/landraces and underutilized species.</p> <p><b>28-32US\$ million, per year, for the next 5 years</b></p>	<p><b>B</b> (User-based payments)  <b>12-14 US\$ millions</b> (upper bound of the estimate range)</p> <p><b>C</b> (Add. voluntary contributions)-<b>8-10 US\$ millions</b> (45-55% of A+B)</p>
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**Table 2.** BSF funding targets associated with different scenarios.