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COMMISSION ON GENETIC RESOURCES FOR FOOD AND AGRICULTURE

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SYNTHESIS PROGRESS REPORT ON THE IMPLEMENTATION OF THE GLOBAL PLAN OF ACTION FOR ANIMAL GENETIC RESOURCES – 2024

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EXECUTIVE SUMMARY

This report presents an analysis of progress made in the implementation of the Global Plan of Action for Animal Genetic Resources (Global Plan of Action)[1] since its adoption in 2007. It updates the information presented in the *Synthesis progress report on the implementation of the Global Plan of Action for Animal Genetic Resources – 2012*,[2] *Synthesis progress report on the implementation of the Global Plan of Action for Animal Genetic Resources – 2014*[3] and *Synthesis progress report on the implementation of the Global Plan of Action for Animal Genetic Resources – 2020*.[4]

The report is based on data collected via a reporting process originally endorsed by the Commission on Genetic Resources for Food and Agriculture (Commission) at its Fourteenth Regular Session in 2013,[5] and reconfirmed at the Nineteenth Regular Session in 2023.[6] Countries, regional focal points and networks for animal genetic resources, and relevant international organizations were invited to complete questionnaires on their implementation of activities relevant to the implementation of the Global Plan of Action.

The analysis of country-level implementation presented in this report is based on the set of indicators that were used in the preparation of the 2012, 2014, and 2020 synthesis progress reports and were agreed upon by the Commission at its Fourteenth Regular Session.[7] Indicator scores were calculated for individual countries and at subregional, regional and global levels. The impact of the Global Plan of Action was assessed based on the proportion of countries reporting progress in the various elements of the Global Plan of Action since its adoption in 2007.

As of 2 August 2024, country progress reports had been submitted by 104 countries. Reports were also received from three subregional or regional focal points or networks and from 11 international organizations.

The country reports reveal that implementation of the Global Plan of Action did not progress measurably over the last four years. Implementation in all four strategic priority areas of the Global Plan of Action stagnated, and deterioration has been reported in the status of collaboration and funding. For both the latter components, implementation was reported to be at a low level (except for collaboration in Europe and the Caucasus, which is reported to be at a medium level). For the strategic priority areas, the overall level of implementation, as well as the progress made since the adoption of the Global Plan of Action, varies greatly among countries and regions. Implementation is generally reported to be at a high level in Europe and the Caucasus and in North America, at a medium level in Africa, Asia, and Latin America and the Caribbean, at low to medium levels in the Near and Middle East, and at a low level in the Southwest Pacific. Conservation is generally the strategic priority area with the lowest level of implementation.

The regional progress reports from Africa, Europe, and Latin America and the Caribbean indicate varying levels of activity, depending on the operational modalities and funding of the reporting organizations. Each of the three organizations reported activities in the four strategic priority areas of the Global Plan of Action. In particular, the African Union – Interafrican Bureau for Animal Resources (AU-IBAR) and the European Regional Focal Point (ERFP) reported substantial progress in the establishment and improvement of regional gene banks and gene bank networks.

International organizations continue to make significant contributions to the implementation of the Global Plan of Action. In general, these actors stress the involvement of local stakeholders to ensure

[1] FAO. 2007. *Global Plan of Action for Animal Genetic Resources and the Interlaken Declaration*. Rome. https://openknowledge.fao.org/handle/20.500.14283/a1404e
[2] CGRFA/WG-AnGR-7/12/Inf.3.
[3] CGRFA/WG-AnGR-8/14/Inf.5
[4] CGRFA/WG-AnGR-11/21/Inf.3
[5] CGRFA-14/13/Report, paragraph 72.
[6] CGRFA-19/23/Report, paragraph 107.
[7] CGRFA-14/13/Report, paragraph 28.

ownership of activities and initiatives, and to maximize impact. The activities of these organizations span the four strategic priority areas. The main constraint they report is lack of funding.

The results presented in this report indicate that the task of improving the management of the world's animal genetic resources for food and agriculture remains far from being complete, and that this implementation deficit may have worsened somewhat in recent years. Given that funding was frequently noted as a constraint by both countries and international organizations, this deteriorating trend may be linked to a decrease in financial resources. Decision-makers are encouraged to use the country-level indicators presented in this report as a means of identifying strategic priority areas and strategic priorities where national action is particularly required.

INTRODUCTION

In September 2007, the International Technical Conference on Animal Genetic Resources for Food and Agriculture, held in Interlaken, Switzerland, adopted the Global Plan of Action for Animal Genetic Resources (Global Plan of Action).[8] The Global Plan of Action was subsequently endorsed by the Thirty-fourth Session of the FAO Conference.[9] The main responsibility for implementing the Global Plan of Action lies with national governments.[10] However, some strategic priorities are particularly relevant to implementation at regional or international levels. Table 1 illustrates the main levels of implementation (national, regional or international) for each strategic priority.

The Commission on Genetic Resources for Food and Agriculture (Commission), at its Eleventh Regular Session in 2007, agreed that follow-up to the International Technical Conference should be part of the Commission's Multi-Year Programme of Work and that the Commission should oversee the implementation of the Global Plan of Action.[11] The Commission also requested the development of modalities for evaluating progress in the implementation of the Global Plan of Action.[12]

At its Twelfth Regular Session in 2009, the Commission adopted a schedule for reporting on the implementation of the Global Plan of Action, which involves the preparation of country progress reports, as well as reports from regional focal points for animal genetic resources and relevant international organizations. The Commission endorsed the flexible use of a questionnaire[13] prepared by FAO to assist countries in the preparation of their country progress reports, and requested FAO to enable countries to report electronically.[14] The first round of reporting led to the preparation of the *Synthesis progress report on the implementation of the Global Plan of Action for Animal Genetic Resources – 2012*.[15] A second round in 2014, undertaken as part of the reporting process for the preparation of *The Second Report on the State of the World's Animal Genetic Resources for Food and Agriculture*,[16] resulted in the *Synthesis progress report on the implementation of the Global Plan of Action for Animal Genetic Resources – 2014*.[17] In 2020, the third round of reporting led to the *Synthesis progress report on the implementation of the Global Plan of Action for Animal Genetic Resources – 2020.*[18]

At its Nineteenth Regular Session, the Commission endorsed the preparation of a fourth review of progress in the implementation of the Global Plan of Action, following the reporting format that had been used for the preparation of the previous synthesis reports.[19]

I. PROGRESS IN THE IMPLEMENTATION OF THE GLOBAL PLAN OF ACTION AT THE COUNTRY LEVEL

A. Data collection

The questionnaire for reporting by countries and international organizations consisted primarily of multiple-choice questions for which responses were obligatory. Most of these questions also included

[8] FAO. 2007. *Global Plan of Action for Animal Genetic Resources and the Interlaken Declaration*. Rome. https://openknowledge.fao.org/handle/20.500.14283/a1404e
[9] C 2007/REP, paragraph 147.
[10] Global Plan of Action for Animal Genetic Resources, paragraph 56; http://www.fao.org/docrep/010/a1404e/a1404e00.htm.
[11] CGRFA-11/07/Report, paragraph 17.
[12] CGRFA-11/07/Report, paragraph 23.
[13] CGRFA-12/09/Inf.9.
[14] CGRFA-12/09/Report, paragraph 38.
[15] CGRFA/WG-AnGR-7/12/Inf.3 at http://www.fao.org/docrep/meeting/026/me636e.pdf
[16] FAO. 2015. *The Second Report on the State of the World's Animal Genetic Resources for Food and Agriculture,* edited by B.D. Scherf & D. Pilling. FAO Commission on Genetic Resources for Food and Agriculture Assessments. Rome https://www.fao.org/3/i4787e/i4787e.pdf
[17] CGRFA/WG-AnGR-8/14/Inf.5 at http://www.fao.org/3/a-at136e.pdf
[18] CGRFA/WG-AnGR-11/21/Inf.3
[19] CGRFA-19/23/Report, paragraph 107.

text boxes in which countries and organizations could voluntarily provide additional details.

Table 1. Priority levels of implementation (national, regional or international) of the strategic priorities of the Global Plan of Action for Animal Genetic Resources

GLOBAL PLAN OF ACTION FOR ANIMAL GENETIC RESOURCES	STRATEGIC PRIORITY AREA 1 CHARACTERIZATION, INVENTORY AND MONITORING OF TRENDS AND ASSOCIATED RISKS	STRATEGIC PRIORITY AREA 2 SUSTAINABLE USE AND DEVELOPMENT	STRATEGIC PRIORITY AREA 3 CONSERVATION	STRATEGIC PRIORITY AREA 4 POLICIES, INSTITUTIONS AND CAPACITY BUILDING
NATIONAL	**SP 1** Inventory and characterize AnGR, monitor trends and risks associated with them, and establish country-based early-warning and response systems	**SP 3** Establish and strengthen national sustainable use policies **SP 4** Establish national species and breed development strategies and programmes **SP 5** Promote agro-ecosystems approaches to the management of AnGR **SP 6** Support indigenous and local production systems and associated knowledge systems of importance to the maintenance and sustainable use of AnGR	**SP 7** Establish national conservation policies **SP 8** Establish or strengthen in situ conservation programmes **SP 9** Establish or strengthen ex situ conservation programmes	**SP 12** Establish or strengthen national institutions, including national focal points, for planning and implementing AnGR measures, for livestock sector development **SP 13** Establish or strengthen national educational and research facilities **SP 14** Strengthen national human capacity for characterization, inventory, and monitoring of trends and associated risks, for sustainable use and development, and for conservation **SP 18** Raise national awareness of the roles & values of AnGR **SP 20** Review and develop national policies and legal frameworks for AnGR
REGIONAL			**SP 10** Develop and implement regional and global long-term conservation strategies	**SP 17** Establish Regional Focal Points and strengthen international networks
INTERNATIONAL	**SP 2** Develop international technical standards and protocols for characterization, inventory, and monitoring of trends and associated risks		**SP 11** Develop approaches and technical standards for conservation	**SP 15** Establish or strengthen international information sharing, research and education **SP 16** Strengthen international cooperation to build capacities in developing countries and countries with economies in transition, **SP 19** Raise regional and international awareness of the roles and values of AnGR **SP 21** Review and develop international policies and regulatory frameworks relevant to AnGR **SP 22** Coordinate the Commission's efforts on AnGR policy with other international forums **SP 23** Strengthen efforts to mobilize resources, including financial resources, for the conservation, sustainable use and development of AnGR

In October 2023, FAO invited, via Circular State Letter CSL C/NSA-7 of 12 October 2023, all countries to prepare country reports using an electronic questionnaire,[20] which was made available individually to each National Coordinator for the Management of Animal Genetic Resources (NC-AnGR) together with a unique username and password. Countries were requested to submit their reports by 30 June 2024 and were informed that use of the electronic questionnaire was compulsory, as this would enable FAO to transfer the data to a database for analysis. A similar invitation was dispatched to international organizations in March 2024. The coordinators of regional focal points and networks received their invitations from the Secretary of the Intergovernmental Technical Working Group on Animal Genetic Resources for Food and Agriculture (Working Group) in July 2024 and were provided access to the questionnaires of countries within their respective regions.

B. Data analysis

Status of implementation of the Global Plan of Action

Prior to the preparation of the first synthesis progress report, a set of indicators had been developed for use in summarizing the information reported in the country progress reports: six indicators at strategic priority area (SPA) level (one for each of the four SPAs, one for the state of collaboration and one for the state of funding – the latter two relating to Part 3 of the Global Plan of Action "Implementation and financing …"); and 14 indicators at strategic priority level (addressing the 13 strategic priorities intended for implementation mainly at national level – one indicator per strategic priority, except for Strategic Priority 1, for which two indicators were established). Targets were formulated for each of the indicators. The use of these targets and indicators to monitor progress in the implementation of the Global Plan of Action was agreed upon by the Commission at its Fourteenth Regular Session.[21] Each indicator is based on one or more of the multiple-choice questions in the country progress report questionnaire. The relationships between the questions and the indicators are shown in Annex 1. Because of the concise nature of the questionnaire agreed upon by the Commission, in some cases, the set of questions associated with a given indicator does not fully cover all aspects of the respective strategic priority or SPA.

The indicator scores are calculated as follows: (i) The answers to the multiple-choice questions are classified into three categories**:** low level of implementation (no action undertaken); medium level of implementation (some action undertaken but more required to achieve full implementation); and high level of implementation (action completed either prior to or since the adoption of the Global Plan of Action). (ii) Each of these levels of implementation is assigned a score (0 = low level of implementation; 1 = medium level of implementation; 2 = high level of implementation). (iii) An overall score for each indicator is obtained by calculating the arithmetic mean of the scores for all the questions assigned to the respective indicator. (iv) Scores are calculated at national, subregional, regional and global levels.

Classification of countries into regions and subregions is based on the classification system used in *The State of the World's Animal Genetic Resources for Food and Agriculture*[22] (see Figure 1).

For presentation purposes, indicator scores are divided into eight classes, evenly distributed between the minimum score of 0 and the maximum score of 2. The eight classes are represented by eight colours – three shades of green (representing high levels of implementation), two of yellow (representing medium levels of implementation) and three of red (representing low levels of implementation). The colours and their respective scores and levels are shown in Table 2.

[20] The invitation, questionnaire and instructions are available at http://www.fao.org/animal-genetics/global-policy/reporting-system/reporting-processes/en/

[21] CGRFA-14/13/Report, paragraph 28.

[22] FAO. 2007. *The State of the World's Animal Genetic Resources for Food and Agriculture*, edited by Barbara Rischkowsky & Dafydd Pilling. Rome https://www.fao.org/3/a1250e/a1250e.pdf

Table 2. Colour scale used to express the indicators

Scores for colour class	Indicator colour	Indicator level
0.00 – 0.25		Low
>0.25 – 0.50		Low
>0.50 – 0.75		Low
>0.75 – 1.00		Medium
>1.00 – 1.25		Medium
>1.25 – 1.50		High
>1.50 – 1.75		High
>1.75 – 2.00		High

Impact of the Global Plan of Action

In addition to presenting the above-described indicators of the current state of implementation of the various elements of the Global Plan of Action, this synthesis progress report includes an analysis of the extent to which the implementation of Global Plan of Action has led to changes in the targeted fields of activity.[23] Many of the multiple-choice questions in the country progress report questionnaire allow countries to indicate whether the reported level of implementation is a result of progress made before or since the adoption of the Global Plan of Action. The potential answers fall into three categories:

- the respective action was fully implemented prior to the adoption of the Global Plan of Action in 2007 (such answers were classified as "completed before");
- progress has been made since the adoption of the Global Plan of Action, with the respective action now either fully or partially completed (such answers were classified as "progress"); and
- the respective action has not yet been fully implemented (or has not been implemented at all) and no progress has been made since the adoption of the Global Plan of Action (such answers were classified as "no progress").

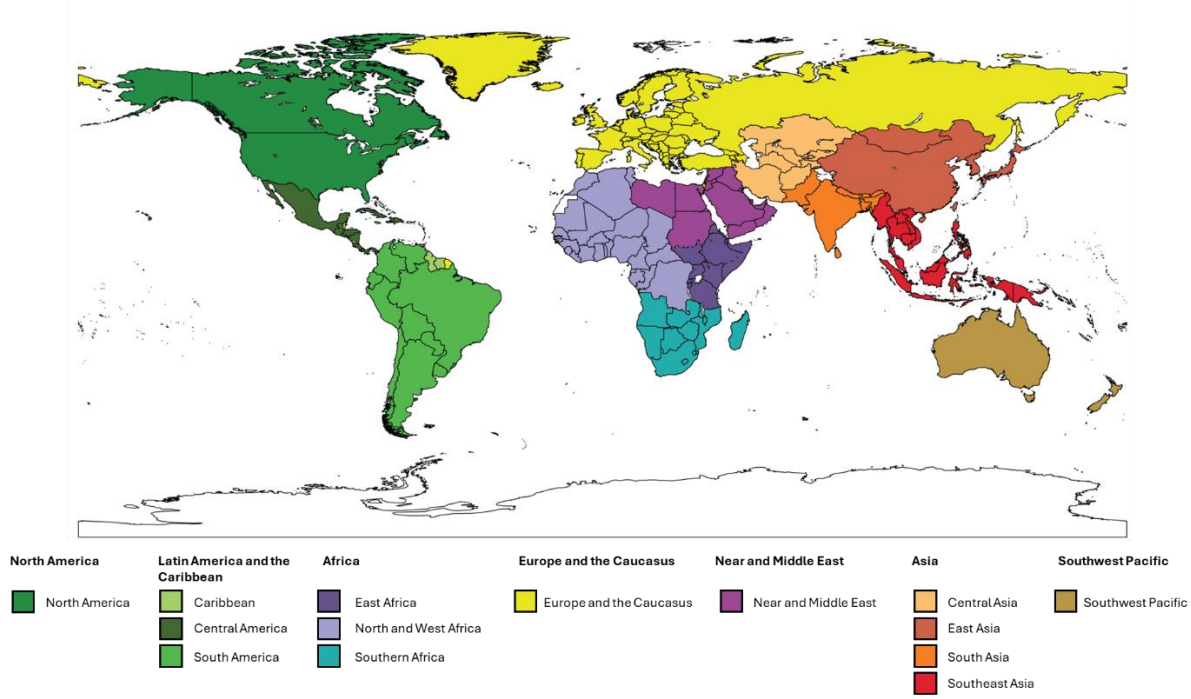
For each SPA, the number of responses falling into each of the three categories was counted and the results presented as relative frequencies (percentages).

Relating process and resource indicators

In addition to agreeing to the use of the above-described targets and indicators for monitoring progress in the implementation of the Global Plan of Action (process indicators), the Commission, at its Fourteenth Regular Session, agreed to the use of a set of indicators for monitoring the status and trends of animal genetic resources for food and agriculture (resource indicators).[24,25] A graphical method of relating resource indicators to process indicators has been developed for SPA 1. For each region, the percentage of national breed populations (excluding extinct breeds) with status for risk of extinction (also referred to as "risk status") is plotted against the regional process indicator score for SPA 1. Relationships between process and resource indicators in other SPAs have not been explored. SPA 1 involves inventory, surveying and monitoring of animal genetic resources for food and agriculture and thus is more directly associated with monitoring of the status of national breed populations than are the other SPAs.

[23]For the purpose of the analysis, any relevant activity undertaken after the adoption of the Global Plan of Action was considered to constitute implementation of the Global Plan of Action. No attempt was made to distinguish activities that might have occurred even if there had been no Global Plan of Action.
[24] CGRFA-14/13/Report, paragraph 28.
[25] CGRFA-14/13/4.2

Figure 1. Classification of countries into regions and subregions



Source: United Nations Geospatial. 2020. Map of the World. United Nations. Cited 05 August 2024. www.un.org/geospatial/file/3420/download?token=TUP4yDmF

C. Results

Answers to the individual questions are summarized graphically and discussed in Annex 2. Responses are presented globally and according to region.

Participation by countries

A total of 104 country reports (i.e. completed questionnaires) were received and analysed. Seventy-five reports were received in English, 15 in French, 14 in Spanish and one in Russian. Country reports will be published on FAO's website.[26] The regional distribution of the country reports is also shown in Table 3. In terms of the proportion of countries that submitted country reports, coverage was more complete in Africa than in any other region (except for North America, which has only two countries, Canada and the United States of America, both of which submitted questionnaires). Table 3 also shows the response rate per region for all four rounds of reporting on implementation the Global Plan of Action (2012, 2014, 2020 and 2024). The highest rate of reporting occurred in 2014, which corresponded to reporting for preparation of *The Second Report on the State of the World's Animal Genetic Resources for Food and Agriculture*.[27] Coverage in the current round was very similar to that in the previous round, with an increase in reporting in the Near and Middle East (40 percent to 53 percent) and a decrease in the Southwest Pacific (27 percent to 13 percent).

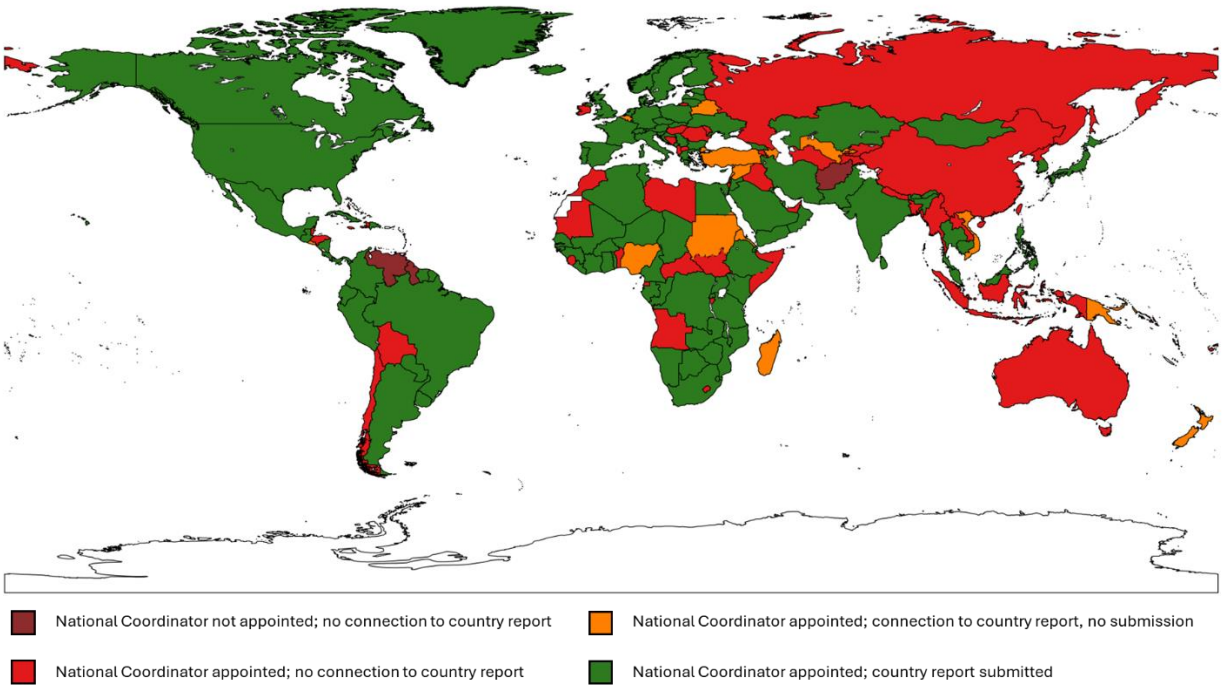
Coverage for the 2024 round of reporting is illustrated in the form of a map in Figure 2. In geographical terms, the main information gaps are in the Southwest Pacific and Central Asia. Figure 2 also shows which countries have an officially nominated NCs-AnGR. As of August 2024, 182 countries had a NC-AnGR according to FAO's records.[28]

[26] http://www.fao.org/animal-genetics/global-policy/reporting-system/countries/en/
[27] FAO. 2015. *The Second Report on the State of the World's Animal Genetic Resources for Food and Agriculture,* edited by B.D. Scherf & D. Pilling. FAO Commission on Genetic Resources for Food and Agriculture Assessments. Rome https://www.fao.org/3/i4787e/i4787e.pdf
[28] http://www.fao.org/dad-is/national-coordinators/en/

Table 3. Overview of the regional distribution of the reports analysed in 2012, 2014 and 2020

Regions	Number of reporting countries in 2024	Number of countries in the region	Coverage (%)			
			2012[29]	2014[30]	2020	2024[31]
Africa	33	51	39	78	67	65
Asia	13	30	27	67	43	43
Europe and the Caucasus	30	53	57	66	57	57
Latin America and the Caribbean	16	33	39	55	45	48
Near and Middle East	8	15	27	47	40	53
North America	2	2	100	50	100	100
Southwest Pacific	2	15	20	47	27	13
World	**104**	**199**	**40**	**64**	**52**	**52**

Figure 2. Map showing which countries have a National Coordinator for the Management of Animal Genetic Resources (as of 2 August 2024) and which connected to or submitted country reports



Source: United Nations Geospatial. 2020. Map of the World. United Nations. Cited 05 August 2024. www.un.org/geospatial/file/3420/download?token=TUP4yDmF

Indicators at the level of strategic priority area, collaboration and funding

Table 4 presents a global summary of the indicators for the four SPAs and for collaboration and funding, expressed as colours and as average scores (see Table 2 for details of the indicator colour scheme).

[29]The following reports were received after the deadline and could thus not be included in the first synthesis progress report: Australia, Azerbaijan, Bangladesh, Italy, Jamaica, Lithuania, Sri Lanka, Viet Nam.
[30]The country report from Morocco did not follow the questionnaire template and could thus not be included in the second synthesis progress report.
[31]As of 2 August 2024.

Tables 5 and 6 present summaries of the indicators for the four SPAs, plus those for collaboration and funding, at regional and subregional levels. Table 7 presents the same information as Table 6 but also includes results for 2012 and 2014. Table 8 shows the indicators for each reporting country.

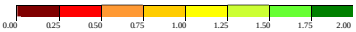
Presenting this set of tables is intended to facilitate comparisons between countries, regions and subregions. The indicator scores (numerical values), which provide the baseline for future comparisons, are presented together with the colour scheme. Yearly results are based on the subset of countries reporting in the respective year.

Table 4. Global overview of indicators for strategic priority areas (SPAs) and collaboration and funding – 2012, 2014 and 2020

Reference in the Global Plan of Action	Indicator colour and average score			
	2012	2014	2020	2024
SPA 1	1.11	0.98	1.16	1.09
SPA 2	1.04	0.89	1.08	1.05
SPA 3	1.01	0.78	0.92	0.86
SPA 4	0.98	0.95	1.16	1.14
Collaboration	0.53	0.54	0.76	0.71
Funding	0.32	0.53	0.59	0.40

Note: Indicator scores are divided into eight evenly distributed classes between a minimum score of 0 and a maximum score of 2.

A score of 2 means that all actions covered by the indicator have been implemented fully. A score of 0 means that no action has been taken. Indicator scores:



Global. Table 4 shows that, globally, the indicators for all four SPAs of the Global Plan of Action show a medium level of implementation and that all four have stagnated, if not slightly decreased, since 2020. Implementation for SPA 3 (Conservation) continues to have a lower level of implementation than the other three SPAs. This may be a logical result, given that conservation is usually the last step to be undertaken in the management of animal genetic resources for food and agriculture and is generally a priority for only a subset of breeds, that is, those breeds that are at risk of extinction. Deterioration has also been reported in the state of collaboration and funding. Funding has decreased particularly sharply (by around 30 percent, according to the scoring system), and is estimated to be below the level of 2014, in contrast to the other elements of the Global Plan of Action.

Table 5. Indicators for strategic priority areas (SPAs) – regional summary

Region	**SPA 1**	**SPA 2**	**SPA 3**	**SPA 4**	**Collaboration**	**Funding**
Africa	0.83	0.87	0.63	1.06	0.66	0.32
Asia	1.11	1.17	0.98	1.17	0.53	0.36
Europe and the Caucasus	1.50	1.38	1.22	1.48	1.01	0.51
Latin America and the Caribbean	0.94	0.92	0.61	0.91	0.55	0.42
Near and Middle East	0.91	0.71	0.67	0.81	0.53	0.42
North America	1.79	1.43	1.68	1.50	0.63	0.33
Southwest Pacific	0.25	0.10	0.18	0.04	0.13	0.33
World	**1.09**	**1.05**	**0.86**	**1.14**	**0.71**	**0.40**

Note: Indicator scores are divided into eight evenly distributed classes between a minimum score of 0 and a maximum score of 2.

A score of 2 means that all actions covered by the indicator have been implemented fully. A score of 0 means that no action has been taken. Indicator scores:

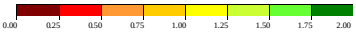


Table 6. Indicators for strategic priority areas (SPAs), collaboration and funding – subregional summary

Region	SPA 1	SPA 2	SPA 3	SPA 4	Collaboration	Funding
Africa	**0.83**	**0.87**	**0.63**	**1.06**	**0.66**	**0.32**
East Africa	0.92	0.97	0.74	1.26	0.71	0.67
North and West Africa	0.78	0.84	0.52	0.96	0.64	0.22
Southern Africa	0.88	0.88	0.78	1.13	0.67	0.30
Asia	**1.11**	**1.17**	**0.98**	**1.17**	**0.53**	**0.36**
Central Asia	1.17	1.63	1.14	1.42	0.81	0.67
East Asia	1.28	1.09	1.30	1.28	0.79	0.67
South Asia	1.27	1.30	0.70	1.23	0.44	0.33
Southeast Asia	0.79	0.88	0.93	0.88	0.28	0.00
Europe and the Caucasus	**1.50**	**1.38**	**1.22**	**1.48**	**1.01**	**0.51**
Latin America and the Caribbean	**0.94**	**0.92**	**0.61**	**0.91**	**0.55**	**0.42**
Caribbean	0.46	0.83	0.41	0.46	0.50	0.67
Central America	0.86	0.90	0.66	0.98	0.41	0.19
South America	1.15	0.96	0.62	0.98	0.70	0.57
Near and Middle East	**0.91**	**0.71**	**0.67**	**0.81**	**0.53**	**0.42**
North America	**1.79**	**1.43**	**1.68**	**1.50**	**0.63**	**0.33**
Southwest Pacific	**0.25**	**0.10**	**0.18**	**0.04**	**0.13**	**0.33**
World	**1.09**	**1.05**	**0.86**	**1.14**	**0.71**	**0.40**

Note: Indicator scores are divided into eight evenly distributed classes between a minimum score of 0 and a maximum score of 2.
A score of 2 means that all actions covered by the indicator have been implemented fully. A score of 0 means that no action has been taken. Indicator scores:

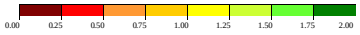
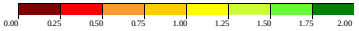


Table 7. Indicators for strategic priority areas (SPAs), collaboration and funding – subregional summary comparing 2012, 2014, 2020 and 2024

Region	Coverage (%)				SPA 1				SPA 2				SPA 3				SPA 4				Collaboration				Funding			
	2012	2014	2019	2024	2012	2014	2019	2024	2012	2014	2019	2024	2012	2014	2019	2024	2012	2014	2019	2024	2012	2014	2019	2024	2012	2014	2019	2024
Africa	**39**	**78**	**67**	**65**	**0.68**	**0.69**	**0.96**	**0.83**	**0.67**	**0.66**	**0.87**	**0.87**	**0.49**	**0.48**	**0.64**	**0.63**	**0.6**	**0.74**	**1.07**	**1.06**	**0.29**	**0.39**	**0.72**	**0.66**	**0.2**	**0.51**	**0.64**	**0.32**
East Africa	40	80	70	60	0.69	0.71	0.93	0.92	0.4	0.61	0.90	0.97	0.41	0.53	0.71	0.74	0.66	0.72	1.04	1.26	0.13	0.31	0.66	0.71	0.33	0.71	1.05	0.67
North and West Africa	50	77	69	69	0.62	0.67	0.88	0.78	0.68	0.7	0.78	0.84	0.47	0.48	0.54	0.52	0.52	0.77	0.97	0.96	0.38	0.58	0.69	0.64	0.21	0.5	0.50	0.22
Southern Africa	20	80	60	60	0.92	0.73	1.15	0.88	0.96	0.64	1.03	0.88	0.7	0.45	0.80	0.78	0.88	0.71	1.30	1.13	0.08	0.15	0.83	0.67	0	0.39	0.59	0.30
Asia	**27**	**67**	**43**	**43**	**1.23**	**1.01**	**1.22**	**1.11**	**1.14**	**0.94**	**1.15**	**1.17**	**1.26**	**0.81**	**1.06**	**0.98**	**1.1**	**0.99**	**1.14**	**1.17**	**0.16**	**0.36**	**0.55**	**0.53**	**0.5**	**0.5**	**0.44**	**0.36**
Central Asia	0	57	0	29		0.92		1.17		1		1.63		0.48		1.14		0.9		1.42		0.22		0.81		0.5		0.67
East Asia	60	80	60	60	1.42	1.31	1.56	1.28	1.22	1.15	1.36	1.09	1.42	1.16	1.21	1.30	1.26	1.21	1.13	1.28	0.08	0.5	0.38	0.79	0.89	0.58	0.56	0.67
South Asia	29	86	57	57	1.08	0.85	1.23	1.27	1.07	0.69	1.13	1.30	0.82	0.71	1.07	0.70	1.11	0.79	1.27	1.23	0	0.33	0.69	0.44	0.33	0.72	0.83	0.33
Southeast Asia	27	55	55	36	1.14	1.03	1.06	0.79	1.11	1	1.07	0.88	1.39	0.89	0.97	0.93	0.93	1.1	1.06	0.88	0.33	0.4	0.54	0.28	0.22	0.22	0.11	0.00
Europe and the Caucasus	**61**	**71**	**57**	**57**	**1.53**	**1.48**	**1.53**	**1.50**	**1.36**	**1.31**	**1.43**	**1.38**	**1.46**	**1.29**	**1.35**	**1.22**	**1.34**	**1.43**	**1.49**	**1.48**	**0.9**	**1.03**	**1.08**	**1.01**	**0.42**	**0.54**	**0.60**	**0.51**
Latin America and the Caribbean	**39**	**55**	**45**	**48**	**0.86**	**0.89**	**1.02**	**0.94**	**0.82**	**0.9**	**1.05**	**0.92**	**0.77**	**0.77**	**0.75**	**0.61**	**0.8**	**0.91**	**1.03**	**0.91**	**0.25**	**0.33**	**0.58**	**0.55**	**0.21**	**0.65**	**0.67**	**0.42**
Caribbean	8	42	25	17	0.17	0.48	0.47	0.46	0.2	0.64	0.62	0.83	0	0.85	0.45	0.41	0.29	0.58	0.38	0.46	0	0.08	0.21	0.50	0	0.53	0.33	0.67
Central America	40	60	60	70	0.79	0.82	1.14	0.86	0.65	0.96	1.16	0.90	0.55	0.71	0.76	0.66	0.66	1.15	1.14	0.98	0	0.43	0.65	0.41	0	0.2	0.67	0.19
South America	73	73	55	64	0.98	1.19	1.17	1.15	0.98	1.02	1.16	0.96	0.98	0.75	0.89	0.62	0.93	0.95	1.23	0.98	0.41	0.44	0.69	0.70	0.33	1	0.83	0.57
Near and Middle East	**29**	**50**	**40**	**53**	**0.73**	**0.57**	**0.83**	**0.91**	**0.8**	**0.33**	**0.37**	**0.71**	**0.48**	**0.22**	**0.47**	**0.67**	**0.57**	**0.35**	**0.65**	**0.81**	**0.25**	**0.25**	**0.33**	**0.53**	**0.5**	**0.38**	**0.44**	**0.42**
North America	**100**	**50**	**100**	**100**	**1.75**	**1.92**	**1.83**	**1.79**	**1.73**	**1.87**	**1.53**	**1.43**	**1.82**	**2**	**1.77**	**1.68**	**1.43**	**1.69**	**1.77**	**1.50**	**1.13**	**1.13**	**1.25**	**0.63**	**0**	**1**	**0.53**	**0.33**
Southwest Pacific	**20**	**47**	**27**	**13**	**0.69**	**0.57**	**0.58**	**0.25**	**0.93**	**0.37**	**0.83**	**0.1**	**0.45**	**0.25**	**0.43**	**0.182**	**0.52**	**0.23**	**0.54**	**0.038**	**0.5**	**0.11**	**0.31**	**0.125**	**0**	**0.38**	**0.33**	**0.33**
World	**41**	**65**	**52**	**52**	**1.11**	**0.98**	**1.16**	**1.09**	**1.04**	**0.89**	**1.08**	**1.05**	**1.01**	**0.78**	**0.92**	**0.86**	**0.98**	**0.95**	**1.16**	**1.14**	**0.53**	**0.54**	**0.76**	**0.71**	**0.32**	**0.53**	**0.59**	**0.40**

Note: Indicator scores are divided into eight evenly distributed classes between a minimum score of 0 and a maximum score of 2.

A score of 2 means that all actions covered by the indicator have been implemented fully. A score of 0 means that no action has been taken. Indicator scores:



Regional, subregional and national. Across countries in Africa, the reported levels of implementation in all SPAs but SPA 3 were medium. Africa registered the lowest scoring indicator for funding among all regions. At the subregional level, East and Southern Africa had higher scores than North and West Africa. For East Africa specifically, implementation can be considered high for SPA 4 (Policies, institutions and capacity building). Among individual countries (Table 9), Ethiopia, Kenya and Togo all generally reported medium to high levels of implementation, while Niger, South Africa and Uganda reported having reached a high level of implementation in most fields.

As a group, the reporting countries from Asia have reached a medium level of implementation in all the SPAs but low levels of implementation in both collaboration and funding. Compared to other subregions, Southeast Asia appears to be less advanced in general for the SPAs and for collaboration and funding. India, the Republic of Korea and Thailand reported high levels of implementation for all four SPAs. Nearly all countries in Asia, however, report low levels of funding, with the exception of the Republic of Korea.

On average, countries in Europe and the Caucasus have reached a high level of implementation in all four SPAs apart from SPA 3 (Conservation). Collaboration is at a medium level and the state of funding remains at a low level, even though the region scores higher than all other regions (0.51). Only four of 30 countries (Cyprus, Denmark, Georgia and Luxembourg) reported low levels of implementation for more than two indicators. Poland, Spain and Switzerland reported high levels implementation for all six indicators and several other countries reported high levels of implementation for all indicators except funding.

Countries in Latin America and the Caribbean on average reported a medium level of implementation in all SPAs except SPA 3 (Conservation). As in many other regions, reported levels of collaboration and funding were quite low. The region is characterized by great variability in the state of implementation of the Global Plan of Action at subregional and country levels. Implementation was lower on average among Caribbean and Central American countries than among countries in South America. While the Dominican Republic, Guatemala and Suriname reported low levels of implementation for all indicators, Brazil has in contrast achieved high levels of implementation across all indicators.

On average, countries in the Near and Middle East reported medium levels of implementation for SPA 1 and SPA 4, and low levels for SPA 2 and SPA 3. Oman generally reported the highest levels of implementation within the region, despite a deficit in the case of collaboration and funding. Qatar, Saudi Arabia and Yemen reported low levels implementations for all indicators.

On average, the two North American countries have reached medium to high levels of implementation across all four SPAs. Collaboration and funding are less well developed, perhaps because the presence of strong commercial livestock sectors in both countries decreases the need for public support.

The two reporting countries in the Southwest Pacific have very low scores for all indicators. Tonga in particular reported a near absence of activity in implementing the Global Plan of Action.

Table 8. Average indicators for strategic priority areas, collaboration and funding at country level

Region	Strategic Priority Areas				Collaboration	Funding
	SPA 1	SPA 2	SPA 3	SPA 4		
Africa	**0.83**	**0.87**	**0.63**	**1.06**	**0.66**	**0.32**
East Africa	**0.92**	**0.97**	**0.74**	**1.26**	**0.71**	**0.67**
Djibouti	0.00	0.00	0.00	0.46	0.13	0.00
Ethiopia	1.17	1.27	1.09	1.38	0.63	0.67
Kenya	1.08	1.33	0.45	1.69	0.25	0.67
Rwanda	0.75	0.80	0.73	1.38	0.75	0.67
Uganda	1.50	1.60	1.73	1.31	1.88	1.33
United Republic of Tanzania	1.00	0.80	0.45	1.31	0.63	0.67
North and West Africa	**0.78**	**0.84**	**0.52**	**0.96**	**0.64**	**0.22**
Algeria	1.08	0.60	0.73	1.08	0.63	0.00

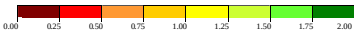
Region	Strategic Priority Areas				Collaboration	Funding
	SPA 1	SPA 2	SPA 3	SPA 4		
Burkina Faso	1.08	0.53	0.18	1.15	1.38	0.00
Cameroon	0.75	1.20	0.55	1.00	0.13	0.00
Chad	0.08	0.13	0.00	0.00	0.00	0.00
Congo	0.17	0.13	0.27	0.31	1.38	0.67
Côte d'Ivoire	0.50	0.80	0.36	1.00	0.00	0.00
Democratic Republic of the Congo	0.67	1.47	0.36	1.31	0.50	0.00
Gabon	0.50	0.60	0.18	0.62	0.00	0.00
Gambia	0.42	0.93	0.64	1.08	0.38	0.00
Ghana	0.75	1.07	0.64	1.15	0.50	0.67
Guinea	0.83	0.67	0.18	0.54	0.88	0.00
Guinea-Bissau	0.58	0.33	0.18	0.85	0.13	0.00
Liberia	0.58	0.33	0.18	0.08	0.25	0.00
Mali	0.83	1.07	0.36	1.23	0.88	0.00
Niger	1.83	1.73	1.73	2.00	1.88	0.00
Senegal	0.83	1.27	1.09	1.31	0.88	1.33
Togo	1.17	1.07	1.27	1.00	1.00	1.33
Tunisia	1.42	1.20	0.45	1.54	0.75	0.00
Southern Africa	**0.87**	**0.88**	**0.78**	**1.13**	**0.67**	**0.30**
Botswana	0.58	0.40	0.45	1.08	0.00	0.00
Eswatini	1.08	1.07	0.55	1.15	0.63	0.67
Malawi	0.45	0.13	0.00	0.31	0.25	0.00
Mauritius	0.75	0.40	0.45	1.08	0.00	0.00
Mozambique	0.67	1.07	1.27	1.08	1.50	0.67
Namibia	0.75	0.87	0.73	1.15	0.63	0.67
South Africa	2.00	1.80	1.82	2.00	0.88	0.67
Zambia	0.75	0.87	0.91	0.85	0.63	0.00
Zimbabwe	0.83	1.33	0.82	1.46	1.50	0.00
Asia	**1.11**	**1.17**	**0.98**	**1.17**	**0.53**	**0.36**
Central Asia	**1.17**	**1.63**	**1.14**	**1.42**	**0.81**	**0.67**
Iran (Islamic Republic of)	1.25	1.40	1.00	1.23	0.38	0.67
Kazakhstan	1.08	1.87	1.27	1.62	1.25	0.67
East Asia	**1.28**	**1.09**	**1.30**	**1.28**	**0.79**	**0.67**
Japan	0.83	0.87	1.55	1.23	0.63	0.00
Mongolia	1.33	1.07	0.82	0.62	0.25	0.67
Republic of Korea	1.67	1.33	1.55	2.00	1.50	1.33
South Asia	**1.27**	**1.30**	**0.70**	**1.23**	**0.44**	**0.33**
Bhutan	1.25	1.07	0.55	1.46	0.38	0.67
India	1.83	1.73	1.64	1.77	0.63	0.67
Pakistan	0.92	1.00	0.27	0.77	0.00	0.00
Sri Lanka	1.08	1.40	0.36	0.92	0.75	0.00
Southeast Asia	**0.79**	**0.88**	**0.93**	**0.88**	**0.28**	**0.00**
Cambodia	0.00	0.27	0.00	0.00	0.00	0.00
Malaysia	0.92	1.00	1.09	1.23	0.00	0.00
Philippines	0.67	0.80	0.91	0.92	0.13	0.00
Thailand	1.58	1.47	1.73	1.38	1.00	0.00
Europe and the Caucasus	**1.50**	**1.38**	**1.22**	**1.48**	**1.01**	**0.51**
Austria	1.92	1.87	1.73	1.85	1.13	0.67
Bulgaria	1.58	1.47	1.64	1.69	0.88	0.00
Croatia	1.83	2.00	1.36	2.00	0.63	0.67
Cyprus	1.42	0.53	0.55	0.85	0.25	0.67

Region	Strategic Priority Areas				Collaboration	Funding
	SPA 1	SPA 2	SPA 3	SPA 4		
Czechia	1.58	1.60	1.64	1.38	0.88	0.67
Denmark	1.25	1.29	0.55	0.38	0.50	0.00
Estonia	0.92	1.20	0.82	1.00	0.25	0.67
Finland	1.67	1.33	1.64	1.85	0.88	0.67
France	1.67	1.60	1.45	1.85	1.50	0.00
Georgia	0.00	0.20	0.55	0.62	0.13	0.00
Germany	1.75	1.53	1.36	1.92	1.88	0.67
Greece	1.67	1.27	1.27	1.31	1.38	0.00
Iceland	1.75	1.53	1.18	1.85	0.75	0.67
Italy	1.67	1.00	1.09	2.00	0.88	0.00
Latvia	1.50	1.67	1.09	1.31	0.75	0.00
Lithuania	1.58	1.00	1.00	1.46	0.75	1.33
Luxembourg	0.67	0.80	0.55	0.69	0.63	0.67
Montenegro	1.42	0.80	1.00	1.08	0.63	0.67
Netherlands (Kingdom of the)	1.75	1.87	1.64	1.77	1.50	0.67
Norway	1.83	1.80	1.55	1.85	1.00	0.67
Poland	1.50	1.87	1.45	1.92	1.63	1.33
Portugal	1.83	1.87	1.82	1.77	1.50	0.00
Serbia	1.67	1.00	0.91	1.08	1.50	0.00
Slovakia	1.17	1.60	0.91	1.08	0.75	0.67
Slovenia	1.50	1.40	0.91	1.85	1.25	0.67
Spain	1.75	1.73	1.55	1.92	1.88	1.33
Sweden	1.25	1.20	1.00	1.31	0.88	0.00
Switzerland	1.83	1.80	1.55	2.00	1.75	1.33
Ukraine	1.33	1.20	1.27	1.38	0.38	0.00
United Kingdom	1.83	1.47	1.64	1.46	1.75	0.67
Latin America and the Caribbean	**0.94**	**0.92**	**0.61**	**0.91**	**0.55**	**0.42**
Caribbean	**0.46**	**0.83**	**0.41**	**0.46**	**0.50**	**0.67**
Saint Lucia	0.58	1.13	0.82	0.46	0.88	0.67
Suriname	0.33	0.53	0.00	0.46	0.13	0.67
Central America	**0.86**	**0.90**	**0.66**	**0.98**	**0.41**	**0.19**
Costa Rica	0.58	0.80	0.00	0.85	0.00	0.00
Cuba	1.75	1.67	1.73	2.00	0.88	0.67
Dominican Republic	0.00	0.13	0.45	0.31	0.00	0.00
Guatemala	0.25	0.13	0.00	0.31	0.13	0.00
Mexico	1.42	1.73	0.82	1.77	0.63	0.00
Nicaragua	0.92	0.57	0.18	0.69	0.13	0.00
Panama	1.08	1.27	1.45	0.92	1.13	0.67
South America	1.15	0.96	0.62	0.98	0.70	0.57
Argentina	1.08	1.20	1.09	1.23	1.63	0.67
Brazil	1.83	1.80	1.36	1.69	1.63	1.33
Colombia	1.08	0.87	0.73	1.15	0.13	0.67
Ecuador	0.67	0.33	0.18	0.23	0.00	0.00
Paraguay	0.83	0.60	0.00	0.46	0.88	0.00
Peru	1.08	0.67	0.18	0.54	0.00	0.00
Uruguay	1.50	1.27	0.82	1.54	0.63	1.33
Near and Middle East	**0.91**	**0.71**	**0.67**	**0.81**	**0.53**	**0.42**
Egypt	1.00	0.93	1.00	0.69	0.38	0.00
Jordan	1.08	1.00	0.73	1.08	0.88	0.67
Kuwait	0.83	0.67	0.55	0.62	0.50	0.67

Region	Strategic Priority Areas				Collaboration	Funding
	SPA 1	SPA 2	SPA 3	SPA 4		
Oman	1.50	1.67	1.45	1.85	0.75	0.67
Qatar	0.58	0.07	0.00	0.15	0.00	0.00
Saudi Arabia	0.42	0.07	0.18	0.00	0.00	0.67
Palestine	1.08	0.53	0.73	1.69	1.50	0.67
Yemen	0.75	0.73	0.73	0.38	0.25	0.00
North America	**1.79**	**1.43**	**1.68**	**1.50**	**0.63**	**0.33**
Canada	1.67	1.00	1.55	1.23	0.25	0.00
United States of America	1.92	1.87	1.82	1.77	1.00	0.67
Southwest Pacific	**0.25**	**0.10**	**0.18**	**0.04**	**0.13**	**0.33**
Cook Islands	0.50	0.20	0.36	0.08	0.25	0.67
Tonga	0.00	0.00	0.00	0.00	0.00	0.00
World	**1.09**	**1.05**	**0.86**	**1.14**	**0.71**	**0.40**

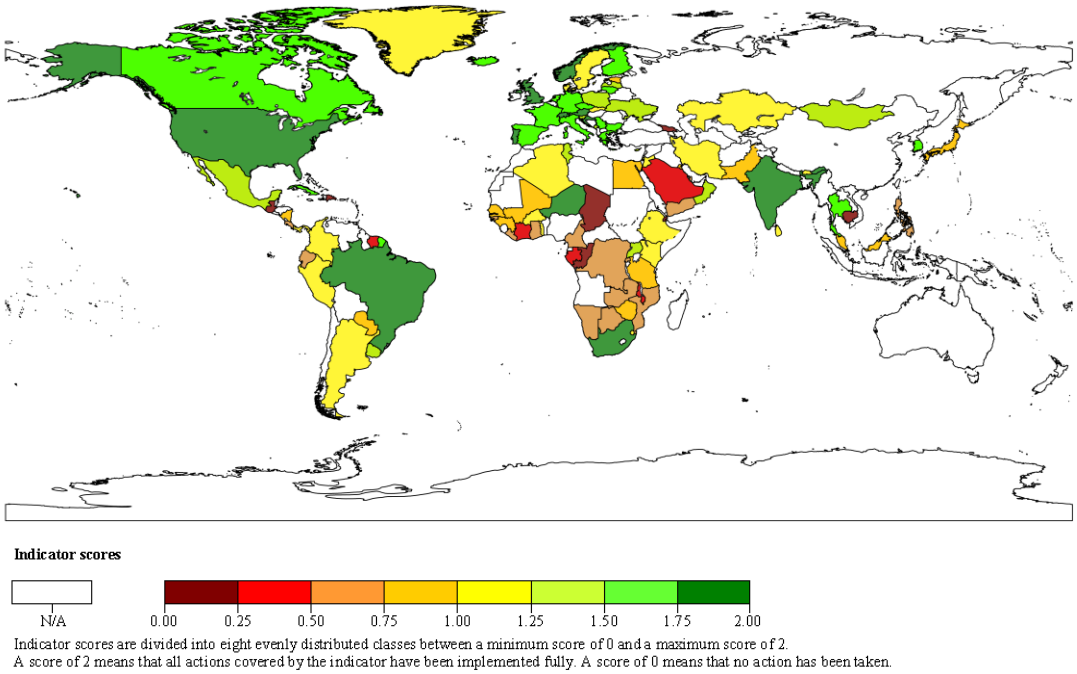
Note: Indicator scores are divided into eight evenly distributed classes between a minimum score of 0 and a maximum score of 2.

A score of 2 means that all actions covered by the indicator have been implemented fully. A score of 0 means that no action has been taken. Indicator scores:



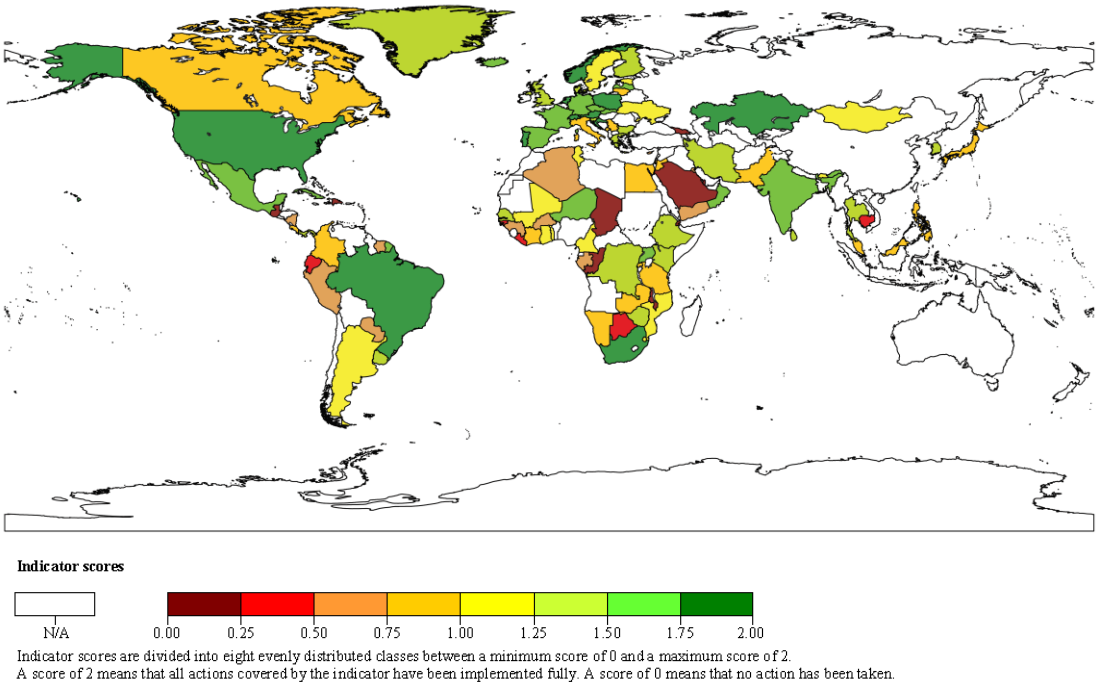
Figures 3 to 8 show the country-level indicators in the form of maps.

Figure 3. Implementing Strategic Priority Area 1 of the Global Plan of Action for Animal Genetic Resources: indicator for the completeness of characterization and inventory and the regularity of monitoring of trends and associated risks



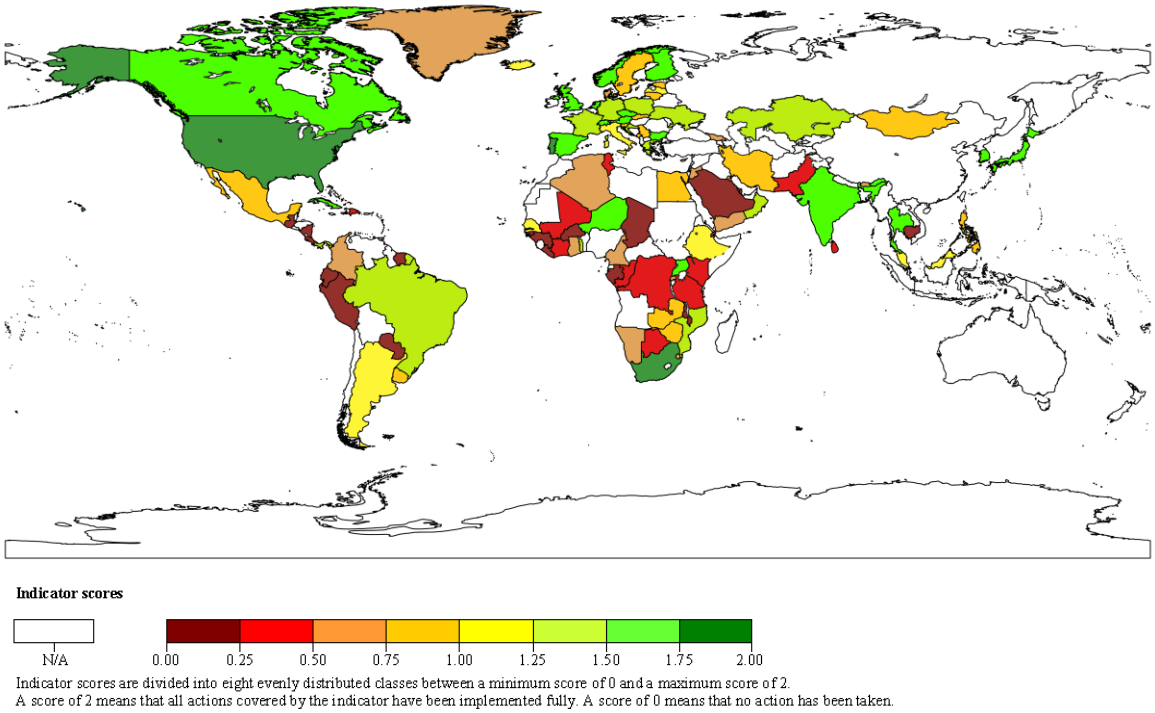
Source: United Nations Geospatial. 2020. Map of the World. United Nations. Cited 05 August 2024. www.un.org/geospatial/file/3420/download?token=TUP4yDmF

Figure 4. Implementing Strategic Priority Area 2 of the Global Plan of Action for Animal Genetic Resources: indicator for the state of sustainable use and development



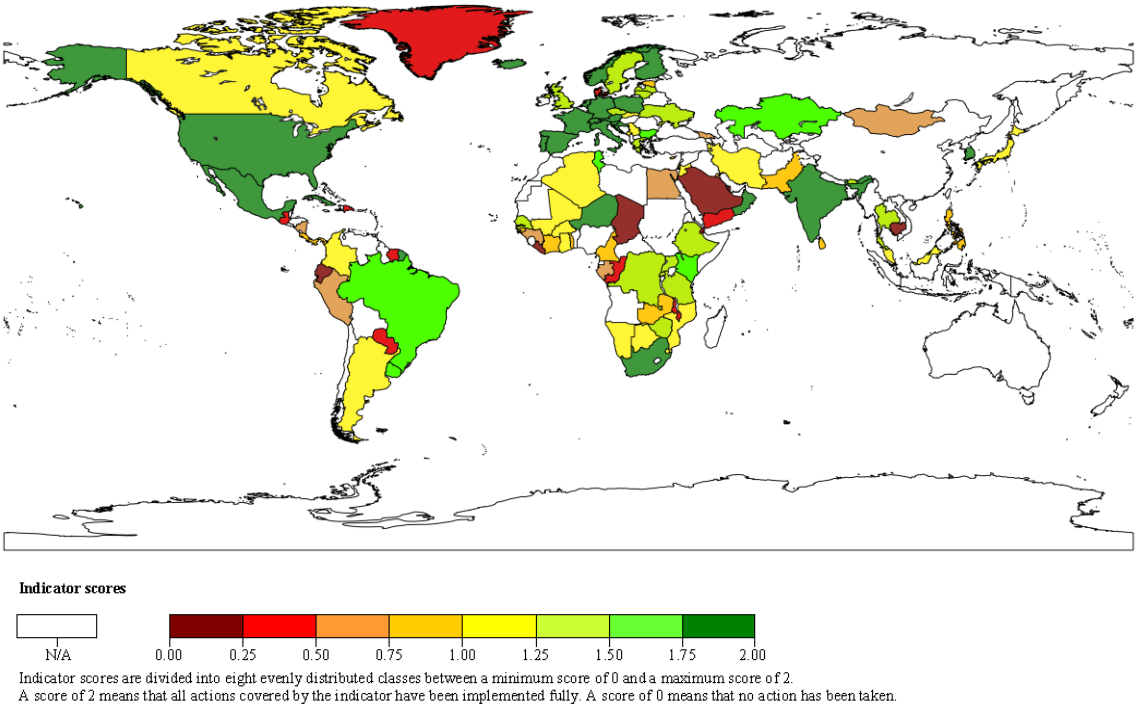
Source: United Nations Geospatial. 2020. Map of the World. United Nations. Cited 05 August 2024. www.un.org/geospatial/file/3420/download?token=TUP4yDmF

Figure 5. Implementing Strategic Priority Area 3 of the Global Plan of Action for Animal Genetic Resources: indicator for the state of national conservation policies



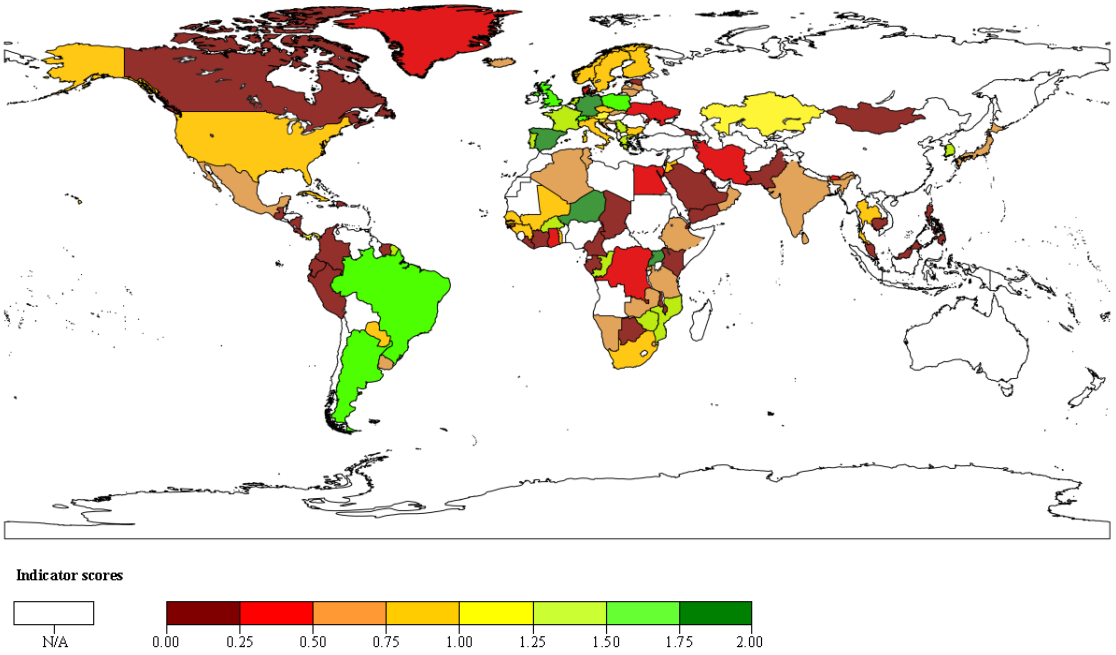
Source: United Nations Geospatial. 2020. Map of the World. United Nations. Cited 05 August 2024. www.un.org/geospatial/file/3420/download?token=TUP4yDmF

Figure 6. Implementing Strategic Priority Area 4 of the Global Plan of Action for Animal Genetic Resources: indicator for the state of national policies and legal frameworks and efforts to strengthen institutional and human capacities



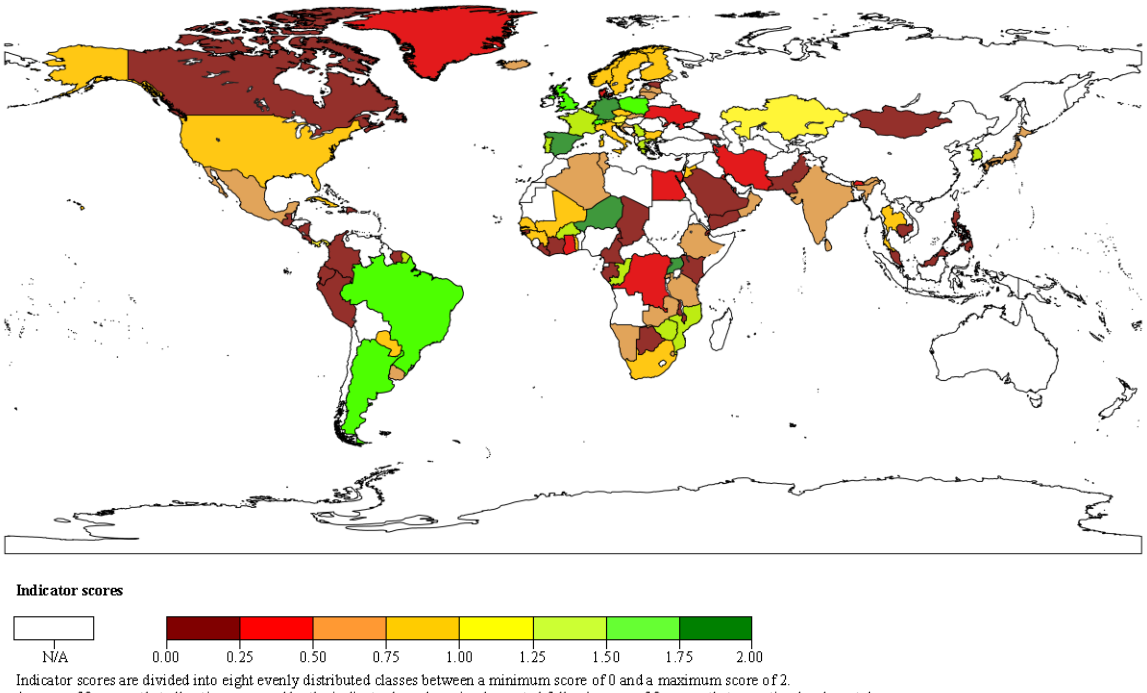
Source: United Nations Geospatial. 2020. Map of the World. United Nations. Cited 05 August 2024. www.un.org/geospatial/file/3420/download?token=TUP4yDmF

Figure 7. Implementing the Global Plan of Action for Animal Genetic Resources: indicator for the state of international collaboration



Source: United Nations Geospatial. 2020. Map of the World. United Nations. Cited 05 August 2024. www.un.org/geospatial/file/3420/download?token=TUP4yDmF

Figure 8. Implementing the Global Plan of Action for Animal Genetic Resources: indicator for the state of funding



Source: United Nations Geospatial. 2020. Map of the World. United Nations. Cited 05 August 2024. www.un.org/geospatial/file/3420/download?token=TUP4yDmF

Indicators at the level of strategic priorities

Table 9 presents a global summary of 2024 data for the indicators at the level of strategic priorities expressed as colours and as average scores (see Table 2 for details of the indicator colour scheme). Table 9 also shows the percentage of reporting countries falling into the high, medium and low categories for each indicator. Tables 10 and 11 present summaries of the strategic priority-level indicators at regional and subregional levels. Table 12 shows the indicator for each reporting country.

Table 9. Global overview of indicators for strategic priorities

Reference in the Global Plan of Action		Countries low (%)	Countries medium (%)	Countries high (%)	Indicator colour and average score
SPA 1 [a]	SP1a	37	20	43	1.17
	SP1b	18	52	30	1.05
SPA 2	SP3	36	22	42	1.02
	SP4	45	15	39	1.02
	SP5	35	40	25	0.96
	SP6	8	46	46	0.94
SPA 3	SP7	32	45	23	1.01
	SP8	44	31	25	0.91
	SP9	48	25	27	0.85
SPA 4	SP12	22	44	34	1.17
	SP13	37	34	30	1.12
	SP14	32	0	68	0.99
	SP18	39	17	43	1.37
	SP20	39	17	43	1.07

[a] *SP 1a corresponds to completeness of characterization and SP 1b corresponds to the completeness of inventory and the regularity of monitoring of trends and associated risks.*

Note: Indicator scores are divided into eight evenly distributed classes between a minimum score of 0 and a maximum score of 2. A score of 2 means that all actions covered by the indicator have been implemented fully. A score of 0 means that no action has been taken. Indicator scores:

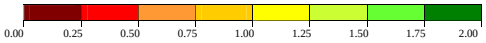


Table 10. Indicators for strategic priorities – regional summary

	SPA 1 [a]		SPA 2				SPA 3			SPA 4				
Region	**SP1a**	**SP1b**	**SP3**	**SP4**	**SP5**	**SP6**	**SP7**	**SP8**	**SP9**	**SP12**	**SP13**	**SP14**	**SP18**	**SP20**
Africa	0.87	0.81	0.91	0.81	0.89	0.76	0.67	0.64	0.77	1.09	0.97	0.74	1.33	1.03
Asia	1.23	1.00	1.27	1.08	1.08	1.08	1.00	0.92	1.21	1.13	1.15	1.12	1.54	1.08
Europe and the Caucasus	1.59	1.49	1.30	1.42	1.25	1.17	1.63	1.50	0.89	1.49	1.47	1.35	1.87	1.38
Latin America and the Caribbean	1.10	0.81	0.91	0.90	0.78	0.69	0.69	0.50	0.69	1.00	0.81	0.88	0.88	0.78
Near and Middle East	0.96	0.96	0.44	0.68	0.50	1.13	0.75	0.63	0.71	0.83	1.13	0.56	0.50	0.88
North America	2.00	1.64	1.25	1.43	1.00	1.50	2.00	2.00	1.50	1.67	1.50	2.00	2.00	1.00
Southwest Pacific	0.00	0.29	0.00	0.00	0.00	0.25	0.00	0.00	0.33	0.00	0.00	0.25	0.00	0.00
World	**1.17**	**1.05**	**1.02**	**1.02**	**0.96**	**0.94**	**1.01**	**0.91**	**0.85**	**1.17**	**1.12**	**0.99**	**1.37**	**1.07**

[a] SP 1 a corresponds to completeness of characterization and SP 1b corresponds to the completeness of inventory and the regularity of monitoring of trends and associated risks.
Note: Indicator scores are divided into eight evenly distributed classes between a minimum score of 0 and a maximum score of 2. A score of 2 means that all actions covered by the indicator have been implemented fully. A score of 0 means that no action has been taken. Indicator scores:

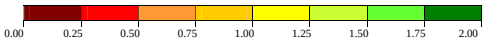


Table 11. Indicators for strategic priorities – subregional summary

Region	SP1a [a]	SP1b	SP3	SP4	SP5	SP6	SP7	SP8	SP9	SP12	SP13	SP14	SP18	SP20
Africa	**0.87**	**0.81**	**0.91**	**0.81**	**0.89**	**0.76**	**0.67**	**0.64**	**0.77**	**1.09**	**0.97**	**0.74**	**1.33**	**1.03**
East Africa	1.06	0.88	1.17	0.95	0.92	0.83	0.67	0.50	0.94	1.11	1.17	0.83	1.67	1.42
North and West Africa	0.74	0.80	0.92	0.71	0.94	0.75	0.50	0.44	0.67	1.11	0.83	0.69	1.00	0.97
Southern Africa	1.00	0.79	0.72	0.90	0.78	0.72	1.00	1.11	0.85	1.04	1.11	0.78	1.78	0.89
Asia	**1.23**	**1.00**	**1.27**	**1.08**	**1.08**	**1.08**	**1.00**	**0.92**	**0.90**	**1.13**	**1.15**	**1.12**	**1.54**	**1.08**
Central Asia	1.00	1.00	1.75	1.57	1.25	1.75	1.00	0.50	1.33	1.33	1.50	1.50	1.00	1.75
East Asia	1.33	1.14	1.33	1.00	0.50	1.17	1.67	1.33	1.11	1.11	1.67	1.50	1.33	1.00
South Asia	1.50	1.18	1.38	1.18	1.63	1.13	0.50	1.00	0.58	1.50	1.00	0.88	2.00	0.88
Southeast Asia	1.00	0.71	0.88	0.79	0.88	0.63	1.00	0.75	0.83	0.67	0.75	0.88	1.50	1.00
Europe and the Caucasus	**1.59**	**1.49**	**1.30**	**1.42**	**1.25**	**1.17**	**1.63**	**1.50**	**0.88**	**1.49**	**1.47**	**1.35**	**1.87**	**1.38**
Latin America and the Caribbean	**1.10**	**0.81**	**0.91**	**0.90**	**0.78**	**0.69**	**0.69**	**0.50**	**0.40**	**1.00**	**0.81**	**0.88**	**0.88**	**0.78**
Caribbean	0.33	0.21	0.75	0.57	1.25	0.75	0.50	0.50	0.17	0.00	0.50	0.75	1.00	0.75
Central America	1.00	0.80	1.21	0.75	0.86	0.79	0.57	0.43	0.38	1.24	0.86	0.86	0.86	0.86
South America	1.43	1.00	0.64	1.14	0.57	0.57	0.86	0.57	0.48	1.05	0.86	0.93	0.86	0.71
Near and Middle East	**0.96**	**0.96**	**0.44**	**0.68**	**0.50**	**1.13**	**0.75**	**0.63**	**0.25**	**0.83**	**1.13**	**0.56**	**0.50**	**0.88**
North America	**2.00**	**1.64**	**1.25**	**1.43**	**1.00**	**1.50**	**2.00**	**2.00**	**1.50**	**1.67**	**1.50**	**2.00**	**2.00**	**1.00**
Southwest Pacific	**0.00**	**0.29**	**0.00**	**0.00**	**0.00**	**0.25**	**0.00**	**0.00**	**0.33**	**0.00**	**0.00**	**0.25**	**0.00**	**0.00**
World	**1.17**	**1.05**	**1.02**	**1.02**	**0.96**	**0.94**	**1.01**	**0.91**	**0.85**	**1.17**	**1.12**	**0.99**	**1.37**	**1.07**

[a] SP 1a corresponds to completeness of characterization and SP 1b corresponds to the completeness of inventory and the regularity of monitoring of trends and associated risks.
Note: Indicator scores are divided into eight evenly distributed classes between a minimum score of 0 and a maximum score of 2. A score of 2 means that all actions covered by the indicator have been implemented fully. A score of 0 means that no action was taken. Indicator scores:

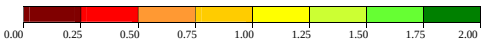


Table 12. Indicators for strategic priorities – country level

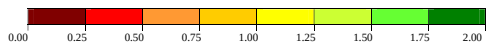
	SPA 1		SPA 2				SPA 3			SPA 4				
Region	**SP1a** [a]	**SP1b**	**SP3**	**SP4**	**SP5**	**SP6**	**SP7**	**SP8**	**SP9**	**SP12**	**SP13**	**SP14**	**SP18**	**SP20**
Africa	**0.87**	**0.81**	**0.91**	**0.81**	**0.89**	**0.76**	**0.67**	**0.64**	**0.77**	**1.09**	**0.97**	**0.74**	**1.33**	**1.03**
East Africa	**1.06**	**0.88**	**1.17**	**0.95**	**0.92**	**0.83**	**0.67**	**0.50**	**0.94**	**1.11**	**1.17**	**0.83**	**1.67**	**1.42**
Djibouti	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
Ethiopia	0.67	1.43	1.50	1.29	1.50	1.00	1.00	1.00	0.67	0.67	1.00	1.00	2.00	1.50
Kenya	1.33	1.00	2.00	1.29	1.50	1.00	0.00	0.00	0.33	2.00	2.00	1.00	2.00	1.50
Rwanda	1.33	0.71	1.50	0.71	0.50	0.50	1.00	1.00	1.33	0.67	1.00	1.00	2.00	2.00
Uganda	1.33	1.43	1.50	1.57	1.50	1.50	2.00	1.00	1.33	2.00	2.00	1.00	2.00	1.50
United Republic of Tanzania	1.67	0.71	0.50	0.86	0.50	1.00	0.00	0.00	0.33	1.33	1.00	1.00	2.00	1.00
North and West Africa	**0.74**	**0.80**	**0.92**	**0.71**	**0.94**	**0.75**	**0.50**	**0.44**	**0.67**	**1.11**	**0.83**	**0.69**	**1.00**	**0.97**
Algeria	1.33	1.00	0.00	0.86	0.00	0.50	1.00	1.00	0.67	0.67	1.00	0.50	2.00	1.00
Burkina Faso	1.33	1.29	0.00	0.29	2.00	0.00	0.00	0.00	0.67	2.00	0.00	0.00	2.00	1.50
Cameroon	1.00	0.57	2.00	1.00	2.00	0.50	0.00	0.00	0.00	2.00	0.00	1.00	0.00	0.50
Chad	0.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Congo	0.00	0.29	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Côte d'Ivoire	0.67	0.57	1.50	0.43	1.00	1.00	1.00	0.00	0.33	0.67	1.00	0.50	0.00	1.50
Democratic Republic of the Congo	0.33	0.71	1.50	1.71	0.50	2.00	0.00	0.00	0.00	1.33	2.00	1.50	2.00	2.00
Gabon	0.33	0.43	0.00	0.29	1.50	1.00	0.00	0.00	0.00	0.67	0.00	0.00	0.00	1.00
Gambia	0.00	0.71	0.00	1.00	1.00	1.50	0.00	1.00	0.00	2.00	1.00	0.50	2.00	1.00
Ghana	0.67	0.71	1.00	0.86	1.50	0.50	1.00	1.00	0.33	2.00	1.00	0.50	0.00	1.50
Guinea	0.00	1.14	1.50	0.57	0.00	0.50	0.00	0.00	0.00	0.00	1.00	0.50	0.00	0.50
Guinea-Bissau	0.33	0.57	1.00	0.00	0.00	0.50	0.00	0.00	0.00	1.33	0.00	0.00	2.00	0.50
Liberia	0.67	0.43	0.00	0.29	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.50	0.00	0.00
Mali	0.67	0.86	2.00	0.57	2.00	1.00	0.00	0.00	0.00	2.00	0.00	1.00	2.00	2.00
Niger	1.33	2.00	2.00	1.43	2.00	2.00	2.00	1.00	1.33	2.00	2.00	2.00	2.00	2.00
Senegal	1.33	0.57	1.50	1.29	1.50	1.00	2.00	2.00	1.33	1.33	2.00	2.00	2.00	0.50
Togo	1.33	1.14	0.50	1.29	0.50	0.50	1.00	1.00	0.67	0.67	2.00	1.00	2.00	0.00
Tunisia	1.67	1.43	2.00	0.86	1.00	1.00	0.00	1.00	0.67	1.33	2.00	1.00	0.00	2.00
Southern Africa	**1.00**	**0.79**	**0.72**	**0.90**	**0.78**	**0.72**	**1.00**	**1.11**	**0.85**	**1.04**	**1.11**	**0.78**	**1.78**	**0.89**
Botswana	0.67	0.71	1.00	0.57	0.00	0.00	1.00	1.00	0.33	1.33	1.00	0.50	2.00	0.50
Eswatini	1.33	1.00	1.00	1.14	0.50	1.50	1.00	1.00	0.00	2.00	1.00	1.00	2.00	0.50
Malawi	0.50	0.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
Mauritius	0.33	0.86	0.00	0.29	0.50	0.50	1.00	1.00	0.33	1.33	1.00	0.00	2.00	0.00
Mozambique	0.67	0.57	0.00	1.00	1.50	1.00	1.00	1.00	1.33	0.67	1.00	1.00	2.00	1.00
Namibia	1.33	0.43	0.50	1.00	1.50	1.00	0.00	1.00	0.33	0.67	1.00	0.50	2.00	1.00
South Africa	2.00	2.00	2.00	2.00	1.00	1.50	2.00	2.00	1.33	2.00	2.00	2.00	2.00	2.00
Zambia	0.67	0.71	1.00	0.71	0.50	0.50	1.00	1.00	0.67	0.00	1.00	1.00	2.00	1.50
Zimbabwe	1.33	0.57	1.00	1.43	1.50	0.50	2.00	2.00	1.00	1.33	1.00	1.00	2.00	1.50

Asia	**1.23**	**1.00**	**1.27**	**1.08**	**1.08**	**1.08**	**1.00**	**0.92**	**0.90**	**1.13**	**1.15**	**1.12**	**1.54**	**1.08**
Central Asia	**1.00**	**1.00**	**1.75**	**1.57**	**1.25**	**1.75**	**1.00**	**0.50**	**1.33**	**1.33**	**1.50**	**1.50**	**1.00**	**1.75**
Iran (Islamic Republic of)	1.33	1.00	1.50	1.43	0.50	1.50	1.00	0.00	1.33	1.33	1.00	1.00	0.00	2.00
Kazakhstan	0.67	1.00	2.00	1.71	2.00	2.00	1.00	1.00	1.33	1.33	2.00	2.00	2.00	1.50
East Asia	**1.33**	**1.14**	**1.33**	**1.00**	**0.50**	**1.17**	**1.67**	**1.33**	**1.11**	**1.11**	**1.67**	**1.50**	**1.33**	**1.00**
Japan	0.67	0.86	1.00	1.00	0.00	1.00	2.00	1.00	1.33	0.67	2.00	1.50	0.00	0.50
Mongolia	1.33	1.14	1.50	0.57	1.00	1.50	1.00	2.00	0.67	0.67	1.00	1.00	2.00	0.50
Republic of Korea	2.00	1.43	1.50	1.43	0.50	1.00	2.00	1.00	1.33	2.00	2.00	2.00	2.00	2.00
South Asia	**1.50**	**1.18**	**1.38**	**1.18**	**1.63**	**1.13**	**0.50**	**1.00**	**0.58**	**1.50**	**1.00**	**0.88**	**2.00**	**0.88**
Bhutan	1.00	1.43	1.50	0.71	1.50	1.50	0.00	2.00	0.67	2.00	0.00	1.00	2.00	1.50
India	2.00	1.71	2.00	1.71	2.00	1.00	1.00	1.00	1.33	2.00	2.00	1.50	2.00	1.00
Pakistan	1.33	0.71	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.33	1.00	0.00	2.00	0.50
Sri Lanka	1.67	0.86	1.00	1.29	2.00	1.00	0.00	1.00	0.33	0.67	1.00	1.00	2.00	0.50
Southeast Asia	**1.00**	**0.71**	**0.88**	**0.79**	**0.88**	**0.63**	**1.00**	**0.75**	**0.83**	**0.67**	**0.75**	**0.88**	**1.50**	**1.00**
Cambodia	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Malaysia	0.67	1.00	1.50	0.86	1.50	0.50	1.00	1.00	1.33	0.67	1.00	1.00	2.00	1.50
Philippines	1.33	0.57	1.00	0.71	0.50	1.00	1.00	1.00	0.67	0.67	1.00	1.00	2.00	1.00
Thailand	2.00	1.29	1.00	1.57	1.50	1.00	2.00	1.00	1.33	1.33	1.00	1.50	2.00	1.50
Europe and the Caucasus	**1.59**	**1.49**	**1.30**	**1.42**	**1.25**	**1.17**	**1.63**	**1.50**	**0.88**	**1.49**	**1.47**	**1.35**	**1.87**	**1.38**
Austria	2.00	1.86	2.00	1.71	2.00	2.00	2.00	2.00	1.67	2.00	2.00	2.00	2.00	2.00
Bulgaria	1.67	1.71	1.00	1.71	2.00	0.00	2.00	2.00	0.67	2.00	2.00	2.00	2.00	1.00
Croatia	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	1.67	2.00	2.00	2.00	2.00	2.00
Cyprus	1.67	1.14	0.00	0.43	0.50	1.00	1.00	1.00	0.00	0.67	1.00	0.50	0.00	0.50
Czechia	1.33	1.57	2.00	2.00	0.50	0.50	2.00	2.00	1.33	1.33	2.00	1.50	2.00	1.00
Denmark	2.00	1.29	0.00	1.71	2.00	1.00	0.00	1.00	0.33	0.67	1.00	0.50	0.00	0.50
Estonia	0.67	1.00	1.00	1.71	0.00	1.00	2.00	2.00	0.33	0.67	1.00	1.00	2.00	1.00
Finland	2.00	1.71	0.50	1.71	1.00	0.50	2.00	1.00	1.67	2.00	1.00	2.00	2.00	2.00
France	2.00	1.71	1.00	1.71	2.00	2.00	2.00	1.00	1.00	2.00	2.00	2.00	2.00	1.50
Georgia	0.00	0.00	0.00	0.00	0.00	0.50	1.00	1.00	0.00	0.00	0.00	0.00	2.00	1.00
Germany	1.67	1.71	2.00	1.29	2.00	1.00	2.00	1.00	1.33	2.00	2.00	1.50	2.00	2.00
Greece	1.67	1.57	1.50	1.29	0.50	1.00	2.00	2.00	0.67	0.67	2.00	1.00	2.00	1.50
Iceland	1.67	1.71	1.00	1.71	1.00	1.50	2.00	2.00	1.00	2.00	2.00	2.00	2.00	2.00
Italy	2.00	1.43	1.00	1.14	0.50	1.00	1.00	1.00	0.67	2.00	2.00	2.00	2.00	2.00
Latvia	1.33	1.43	1.00	1.71	2.00	1.50	2.00	2.00	1.33	1.33	1.00	1.00	2.00	0.50
Lithuania	1.33	1.57	2.00	0.71	1.50	0.50	2.00	1.00	0.67	2.00	1.00	0.50	2.00	1.50
Luxembourg	0.67	0.57	1.00	0.57	1.00	1.00	2.00	1.00	0.33	1.33	0.00	0.00	2.00	0.50
Montenegro	2.00	1.29	1.50	0.29	0.50	1.00	1.00	1.00	0.33	0.67	2.00	1.00	2.00	0.50
Netherlands (Kingdom of the)	1.33	1.86	2.00	1.86	2.00	1.50	2.00	2.00	0.67	2.00	2.00	2.00	2.00	1.50
Norway	2.00	1.71	2.00	1.71	2.00	1.50	2.00	2.00	1.00	1.33	2.00	2.00	2.00	2.00
Poland	1.67	1.57	2.00	2.00	2.00	1.00	2.00	2.00	0.67	2.00	1.00	2.00	2.00	2.00
Portugal	2.00	1.71	2.00	1.71	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	2.00	2.00
Serbia	2.00	1.71	0.00	1.29	0.00	1.00	1.00	2.00	0.33	0.67	1.00	1.00	2.00	0.50
Slovakia	1.67	1.00	2.00	1.57	1.50	1.00	1.00	1.00	0.67	0.67	2.00	1.00	2.00	0.50

Slovenia	1.33	1.71	1.50	1.71	2.00	1.00	2.00	2.00	0.67	2.00	2.00	2.00	2.00	2.00
Spain	1.67	1.71	1.00	1.71	2.00	2.00	2.00	2.00	1.00	2.00	1.00	2.00	2.00	2.00
Sweden	1.33	1.29	1.00	1.00	1.50	1.00	2.00	1.00	0.67	1.33	1.00	1.00	2.00	2.00
Switzerland	2.00	1.71	1.50	2.00	1.00	2.00	2.00	2.00	1.00	2.00	2.00	2.00	2.00	2.00
Ukraine	1.67	1.29	1.50	1.14	0.50	1.00	0.00	0.00	1.33	1.33	2.00	0.50	2.00	0.50
United Kingdom	1.33	2.00	2.00	1.57	0.50	1.00	1.00	1.00	1.33	2.00	1.00	1.50	2.00	1.50
Latin America and the Caribbean	**1.10**	**0.81**	**0.91**	**0.90**	**0.78**	**0.69**	**0.69**	**0.50**	**0.40**	**1.00**	**0.81**	**0.88**	**0.88**	**0.78**
Caribbean	**0.33**	**0.21**	**0.75**	**0.57**	**1.25**	**0.75**	**0.50**	**0.50**	**0.17**	**0.00**	**0.50**	**0.75**	**1.00**	**0.75**
Saint Lucia	0.00	0.43	0.50	1.00	1.50	1.00	1.00	1.00	0.33	0.00	1.00	1.00	0.00	1.00
Suriname	0.67	0.00	1.00	0.14	1.00	0.50	0.00	0.00	0.00	0.00	0.00	0.50	2.00	0.50
Central America	**1.00**	**0.80**	**1.21**	**0.75**	**0.86**	**0.79**	**0.57**	**0.43**	**0.38**	**1.24**	**0.86**	**0.86**	**0.86**	**0.86**
Costa Rica	1.33	0.14	1.50	0.71	1.50	0.50	0.00	0.00	0.00	1.33	0.00	0.50	0.00	0.50
Cuba	2.00	1.57	2.00	1.71	1.00	1.50	2.00	1.00	1.33	2.00	2.00	2.00	2.00	2.00
Dominican Republic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	1.33	0.00	0.00	0.00	0.00
Guatemala	0.00	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.67	0.00	0.00	0.00	0.00
Mexico	1.00	1.43	2.00	1.71	2.00	1.00	1.00	0.00	0.00	2.00	2.00	1.50	2.00	2.00
Nicaragua	1.33	1.00	1.50	0.17	0.00	1.00	0.00	0.00	0.00	0.67	1.00	1.00	0.00	1.00
Panama	1.33	1.29	1.50	0.86	1.50	1.50	1.00	1.00	1.33	0.67	1.00	1.00	2.00	0.50
South America	**1.43**	**1.00**	**0.64**	**1.14**	**0.57**	**0.57**	**0.86**	**0.57**	**0.48**	**1.05**	**0.86**	**0.93**	**0.86**	**0.71**
Argentina	1.33	0.71	1.00	1.29	0.50	1.00	1.00	1.00	0.67	1.33	1.00	1.00	2.00	0.50
Brazil	2.00	1.71	1.50	2.00	2.00	1.00	2.00	1.00	0.67	1.33	1.00	2.00	2.00	1.50
Colombia	1.33	1.00	1.50	1.00	0.50	0.00	1.00	1.00	1.33	1.33	1.00	0.50	0.00	1.50
Ecuador	0.67	0.57	0.00	0.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50	0.00	0.00
Paraguay	1.33	0.57	0.00	0.57	0.00	0.50	0.00	0.00	0.00	0.67	0.00	1.00	0.00	0.00
Peru	1.33	1.00	0.00	1.00	0.00	0.50	0.00	0.00	0.00	0.67	1.00	0.00	0.00	1.00
Uruguay	2.00	1.43	0.50	1.71	1.00	1.00	2.00	1.00	0.67	2.00	2.00	1.50	2.00	0.50
Near and Middle East	**0.96**	**0.96**	**0.44**	**0.68**	**0.50**	**1.13**	**0.75**	**0.63**	**0.25**	**0.83**	**1.13**	**0.56**	**0.50**	**0.88**
Egypt	1.33	0.86	0.00	1.00	0.50	1.00	1.00	1.00	0.33	0.67	1.00	0.50	0.00	1.00
Jordan	1.33	1.29	0.50	1.14	0.50	1.50	1.00	1.00	0.00	2.00	2.00	1.00	0.00	0.50
Kuwait	0.33	1.00	1.00	0.29	1.00	1.00	1.00	1.00	0.67	0.00	0.00	0.50	0.00	1.00
Oman	1.67	1.57	2.00	1.86	1.50	1.50	2.00	2.00	0.67	2.00	2.00	1.00	2.00	2.00
Qatar	1.00	0.57	0.00	0.00	0.00	0.50	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
Saudi Arabia	0.00	0.43	0.00	0.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Palestine	1.00	1.43	0.00	0.29	0.00	2.00	0.00	0.00	0.00	2.00	2.00	1.00	2.00	2.00
Yemen	1.00	0.57	0.00	0.86	0.50	1.00	1.00	0.00	0.33	0.00	1.00	0.50	0.00	0.50
North America	**2.00**	**1.64**	**1.25**	**1.43**	**1.00**	**1.50**	**2.00**	**2.00**	**1.50**	**1.67**	**1.50**	**2.00**	**2.00**	**1.00**
Canada	2.00	1.43	0.50	0.86	1.00	1.00	2.00	2.00	1.67	1.33	2.00	2.00	2.00	0.00
United States of America	2.00	1.86	2.00	2.00	1.00	2.00	2.00	2.00	1.33	2.00	1.00	2.00	2.00	2.00
Southwest Pacific	**0.00**	**0.29**	**0.00**	**0.00**	**0.00**	**0.25**	**0.00**	**0.00**	**0.33**	**0.00**	**0.00**	**0.25**	**0.00**	**0.00**
Cook Islands	0.00	0.57	0.00	0.00	0.00	0.50	0.00	0.00	0.67	0.00	0.00	0.50	0.00	0.00
Tonga	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grand Total	**1.17**	**1.05**	**1.02**	**1.02**	**0.96**	**0.94**	**1.01**	**0.91**	**0.85**	**1.17**	**1.12**	**0.99**	**1.37**	**1.07**

[a] SP 1a corresponds to completeness of characterization and SP 1b corresponds to the completeness of inventory and the regularity of monitoring of trends and associated risks.

Note: Indicator scores are divided into eight evenly distributed classes between a minimum score of 0 and a maximum score of 2. A score of 2 means that all actions covered by the indicator have been implemented fully. A score of 0 means that no action has been taken. Indicator scores:

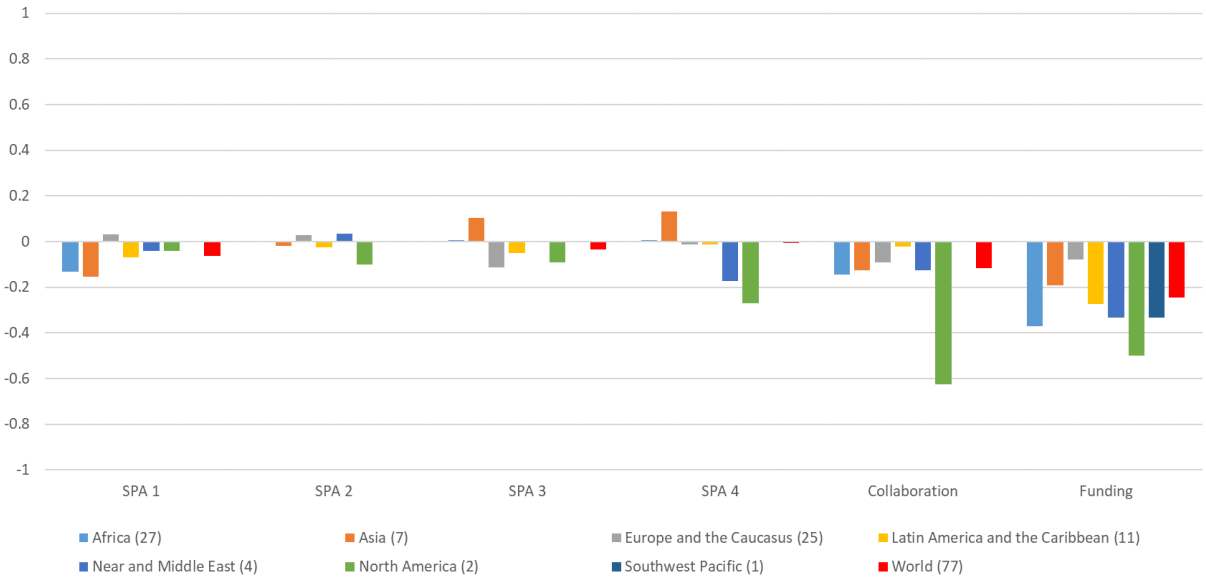


II. CHANGES SINCE 2020 IN THE IMPLEMENTATION OF THE GLOBAL PLAN OF ACTION BY COUNTRIES

Figure 9 presents a comparison of the mean indicator scores in 2020 and 2024 for the various regions of the world, taking into account only the 77 countries that reported in both rounds. The subjective nature of some of the questions, changes in NCs-AnGR (in some cases) and the different contexts in which the data were collected, inasmuch as this round was part of a more comprehensive country-reporting process for *The Third Report State of the World's Animal Genetic Resources for Food and Agriculture* (Third Report), mean that the apparent changes since 2020 must be interpreted with discretion. A decrease in an indicator score since 2020 does not necessarily mean that there has been a decline in the adequacy of provision in the respective SPA. For example, countries may have decided that "Partially completed" is a realistic description of their state of provision in 2024, despite having reported in 2020 that an activity had been "Completed". Similarly, there may have been cases in which a process considered to be "in place" in 2020 was considered "not implemented" in the 2024 round of reporting. This may have occurred because of improved information on the state of provision, a change in how a given process is perceived, an error in past reporting or a growing awareness of the scale of the challenge. In other words, trends in the state of implementation may be confounded by trends in the state of knowledge and awareness at country level.

Globally, countries on average reported almost no progress in the implementation of the Global Plan of Action for each SPA and strategic priority. In the case of collaboration and funding, countries even reported a clear regression. Those trends appear to be similar across regions (Figure 9).

Figure 9. Regional and world-wide changes between 2020 and 2024 in mean indicators for strategic priority areas, collaboration and funding (number of countries per region in parentheses)

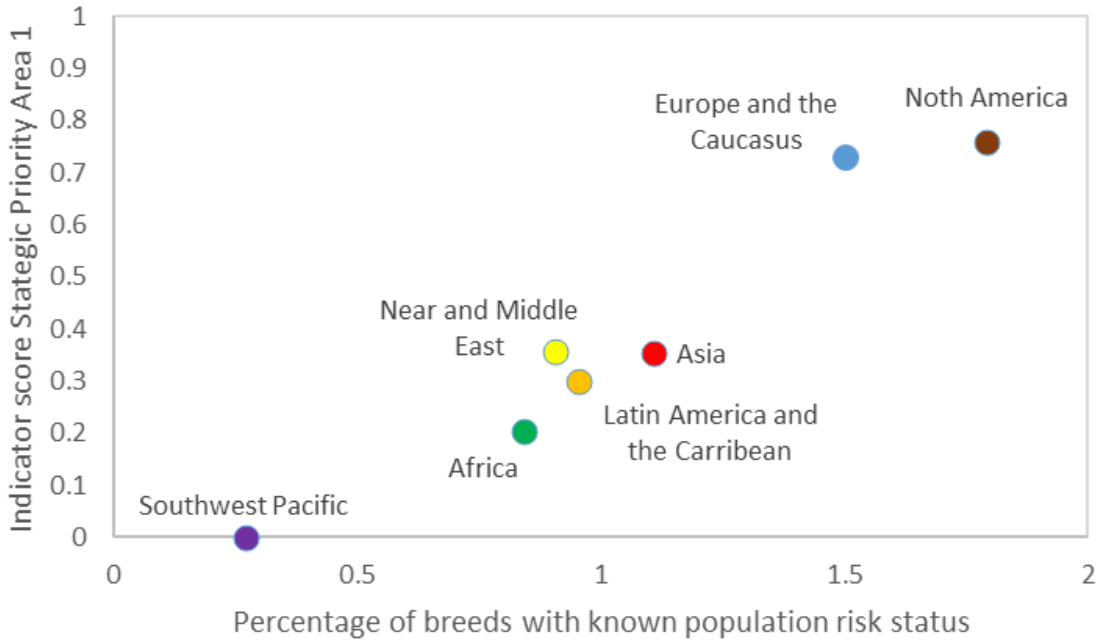


Note: The figure is based on data from the 77 countries that provided reports in both 2020 and 2024.

III. RELATIONSHIPS BETWEEN PROCESS INDICATORS AND GENETIC RESOURCES

The relationship between process and resource indicators is demonstrated in Figure 10, which plots the percentage of national breed populations (excluding extinct breeds) with known population risk status (data extracted from the Domestic Animal Diversity Information System – DAD-IS – in July 2024) against the process indicator score for SPA 1. The results illustrate a clear relationship at a regional level between the implementation of SPA 1 and the knowledge of breeds' risk status. Countries in North America and Europe and the Caucasus tend to have a greater knowledge of the risk status of their breeds and a higher level of SPA 1 implementation than do the other regions. The Southwest Pacific region reports a relatively low level of SPA 1 implementation and low numbers of national breed populations with known risk status. Exploring the relationship between process indicators and other resource indicators, such as proportion of breeds at risk of extinction, is impossible because of a lack of adequate resource metrics, particularly insufficient numbers of breeds with population data.

Figure 10. Relationship between implementation of Strategic Priority Area 1 and the availability of breed population data at regional level



IV. PROGRESS MADE IN THE IMPLEMENTATION OF THE GLOBAL PLAN OF ACTION BY REGIONAL FOCAL POINTS AND NETWORKS

In July 2024, FAO invited Regional (and Subregional) Coordinators for the Management of Animal Genetic Resources to report on progress made in their regions in the implementation of the Global Plan of Action. An electronic questionnaire was made available on the FAO website.[32] FAO also offered to provide the Regional Coordinators with the completed national questionnaires from countries in their respective regions. Regional Coordinators were asked to submit their completed questionnaires by 15 August 2024. They were reminded that the objective of the exercise was to highlight collaborative efforts and indicate regional priorities for capacity building in relation to the implementation of the Global Plan of Action [33] rather than to summarize activities at country level.

Responses were received from the following Regional or Subregional Focal Points and networks:

- European Regional Focal Point for Animal Genetic Resources (ERFP);
- Latin America and the Caribbean's Regional Focal Point;
- African Union – Interafrican Bureau for Animal Resources (AU-IBAR);

The compiled questionnaires will be made available on the FAO website.[34] The following paragraphs summarize the regional activities reported, grouped according to SPA. While Latin America and the Caribbean's Regional Focal Point focused on general activities by the region's countries, ERFP and AU-IBAR reported more on their own activities.

A. Strategic Priority Area 1. Characterization, inventory and monitoring of trends and associated risks

The ERFP continues to contribute to the development of DAD-IS on prototypes, indicators and tools. For instance, assistance was provided to FAO to develop the prototype for implementing honey-bee data in DAD-IS. In Latin American and the Caribbean, most countries improved their inventories of animal genetic resources during the 2020 to 2024 period, but they reportedly face difficulties such as funding shortages, inadequate policies and planning, and insufficient infrastructure and technical resources. The ERFP intends to enhance interaction with other regions and to improve data quality, and it collaborated with FAO in the organization of a technical workshop addressing specific aspects of animal genetic resources management. AU-IBAR has developed and disseminated guidelines for the establishment and strengthening of breed endangerment early warning and response systems. It is also supporting its member states with the development of a harmonized animal genetic resources characterization, inventory and monitoring tool for collecting real-time data in the field.

B. Strategic Priority Area 2. Sustainable use and development

The ERFP developed several "Ad Hoc Actions", for instance to support the establishment of networks and promote Merino sheep, small native horse breeds from the Baltic, and the Simmental cattle breed. In Latin America and the Caribbean, sustainable utilization policies and species/breed development programmes have been established and/or strengthened, and some countries have agroecosystems characterized by their animal genetic resources. Few experiences with support for indigenous and local production systems have been gained, but the need to increase such efforts is acknowledged. AU-IBAR has assisted 22 member states to develop and launch national strategy action plans for animal genetic resources. It also supported the creation of regional guidelines for the formulation and harmonization of policies on cross-breeding. Key regional issues such as animal identification, traceability and performance recording are addressed in these guidelines.

C. Strategic Priority Area 3. Conservation

In Europe, the ERFP's *ex situ* and *in situ* working groups have been working to integrate the two conservation methods. One project, "Strengthening national capacities towards the development of a

[32] http://www.fao.org/3/ca4101en/ca4101en.pdf
[33] CGRFA-12/09/Report. Appendix G.
[34] http://www.fao.org/animal-genetics/global-policy/reporting-system/regions/en/

national gene bank strategy", supports national efforts to develop cryoconservation strategies. Another action aimed to increase the number of member countries enrolled in the European Genebank Network for Animal Genetic Resources (EUGENA). ERFP also joined the European Reference Center for Endangered Breeds (EURC EAB) to work on specific *ex situ* conservation measures in the framework of European animal health legislation, and the *ex situ* working group was heavily involved in the drafting of the animal genetic resources strategy for Europe. The Latin America and the Caribbean Regional Focal Point reported that *in situ* and *ex situ in vivo* conservation programmes have been created to some extent for certain species/breeds. In several counties there are gene banks with cryopreserved material from specialized, local or rare breeds as well as from conventional breeds. AU-IBAR supported a three-phased project (2015, 2016, 2019) on breed conservation that included a total of 98 initiatives related to breeding (SPA 2) and conservation. It also established five regional gene banks for cryoconservation and provides security back-up storage space for countries that have their own gene banks.

D. Strategic Priority Area 4. Policies, institutions and capacity-building

The ERFP reported a close connection with the Working Group on Animal Genetic Resources of the European Federation of Animal Science (EAAP)[35] but also with other European and international organizations such as the European Forum of Farm Animal Breeders (EFFAB),[36] Rare Breeds International (RBI),[37] SAVE (Safeguard for Agricultural Varieties in Europe) Foundation,[38] the Swiss Foundation for the Cultural-Historical and Genetic Diversity of Plants and Animals (ProSpecieRara),[39] the Danubian Alliance for the Preservation of Animal Breeds (DAGENE)[40] and the Nordic Genetic Resource Center (NordGen).[41] Activities related to awareness raising, acceleration of collaborative efforts (for instance through the project European Project GenResBridge)[42] and development of guidance documents were mentioned. In Latin American and the Caribbean, it was reported that collaboration at all levels with the FAO Regional Office was intensified. AU-IBAR reported that five Sub-Regional Focal Points for animal genetic resources were established and anchored in subregional research and development organizations to ensure sustainability. Various capacity-building and awareness-raising activities within the region were reported.

E. Implementation and financing of the Global Plan of Action for Animal Genetic Resources

The ERFP operates with an annual budget of EUR 100 000 for networking and collaboration activities, and since 2023 the EURC EAB has been funded by the European Union for an equivalent amount. Potential fundraising mechanisms and integrated investment plans to ensure permanent instruments for co-funding from the European Union are being explored. Latin America and the Caribbean has strengthened international collaboration to optimize resources and engage in projects with other networks, such as the Ibero-American Network CONBIAND, with funding from the Bill and Melinda Gates Foundation and the World Bank. AU-IBAR is currently aiming to help sustain five above-mentioned regional gene banks through continued resource-mobilization efforts.

[35] http://www.eaap.org
[36] https://www.effab.info
[37] https://www.rarebreedsinternational.org
[38] http://www.save-foundation.net
[39] https://www.prospecierara.ch
[40] http://www.dagene.eu
[41] https://www.nordgen.org
[42] http://www.genresbridge.eu

V. PROGRESS MADE IN THE IMPLEMENTATION OF THE GLOBAL PLAN OF ACTION BY INTERNATIONAL ORGANIZATIONS

In accordance with the reporting schedule agreed by the Commission, FAO, in March 2024, invited 188 international organizations to report, via an electronic questionnaire made available online[43] and on the FAO web site,[44] on the activities they have undertaken to implement the Global Plan of Action. This was the fourth round of reporting by international organizations, which had been invited in 2012, 2014 and 2020 to complete the same questionnaire.

Detailed analysis of the activities of international organizations in implementing the Global Plan of Action was provided in the 2012, 2014 and 2020 synthesis progress reports.[45,46,47] The reports concluded that a number of international organizations were making important contributions to the implementation of the Global Plan of Action, often via innovative, efficient and participatory programmes and projects, but that given the limited uptake of the survey, it was unclear to what extent the Global Plan of Action had influenced the activities of the majority of international organizations working in the livestock sector. The activities of international organizations were distributed across the four SPAs of the Global Plan of Action. The information obtained during this latest round of reporting is consistent with these general conclusions. Some new developments are described below. The reports will made available on the FAO website after the completion of the reporting process for the Third Report.

Eleven reports were received in 2024, compared to fourteen in 2020. The following organizations submitted reports in 2024:

- Arab Center for the Studies of Arid Zones and Dry Lands
- Asian Development Bank (ADB)
- The Centre for Coordination of Agricultural Research and Development for Southern Africa (CCARDESA)
- DesertNET International
- EAAP
- Heifer International
- International Atomic Energy Agency (IAEA)
- International Livestock Research Institute (ILRI)
- NordGen
- RBI*
- SAVE Foundation

Four organizations provided reports in both 2020 and 2024 (Heifer International, IAEA, NordGen and RBI). This is three less than during the last round of reporting: seven organizations responded in both 2014 and 2020. Three organizations submitted reports for the first time. Their reported activities are described in the following paragraphs.

CCARDESA is a Botswana-based organization founded to harmonize agricultural research and development. It mentions the need for increased budget allocation for multiple activities, one of which is support for livestock censuses. It works with stakeholders to increase awareness of the value and qualities of local breeds and to halt indiscriminate cross-breeding.

The ADB works on large-scale livestock projects, three of which are currently in Cambodia, the Lao People's Democratic Republic and Uzbekistan. Its projects focus on livestock health, value-chain improvement and climate change resilience. Most activities reported relate to the establishment of national breeding programmes using local breeds.

[43] https://form.jotform.com/240443552552351
[44] https://www.fao.org/animal-genetics/global-policy/reporting-system/reporting-processes/en/
[45] http://www.fao.org/docrep/meeting/027/mg044e.pdf
[46] http://www.fao.org/3/a-at136e.pdf
[47] https://openknowledge.fao.org/server/api/core/bitstreams/fa60175a-6d82-44fe-9337-ecbfaad0b49e/content

DesertNET reported on its work on breed identity verification, particularly as it relates to local communities, grazing systems and breeding decisions. Activities include creating an online academy to provide knowledge to local farmers, and developing methodologies and strategies pertaining to the sustainable management of animal genetic resources.

The reports submitted describe a wide range of activities related to the organizations' particular mandates. Almost all the organizations (ten out of eleven) reported supporting countries with the development, reviewing or adjustment of their national policies, and contributing to the development of mechanisms for facilitating interactions among stakeholders, scientific disciplines and sectors as part of planning efforts for the sustainable use and development of animal genetic resource. A large majority of organizations (eight out of eleven) also reported promoting agroecosystem approaches, or supporting or facilitating the establishment of institutional frameworks for planning and implementing animal genetic resources programmes. Only four organizations (NordGen, SAVE, ACSAD and ILRI) reported activities related to the establishment of emergency response systems or to protection of breeds from human-induced disasters. All organizations reported having collaborative links to other stakeholders involved in the management of animal genetic resources.

Ten organizations indicated that they consider that erosion of animal genetic resources is occurring, with the other organization answering that they were not sure. Reasons given for this erosion were the shift towards industrial agriculture, lack of support systems, uncontrolled cross-breeding and population loss. A number of organizations reported similar obstacles to their work, with a lack of funding and lack of access to relevant resources and skilled personnel being the most common constraints mentioned.

VI. CONCLUSIONS

After modest progress reported between 2014 and 2020, the implementation of the Global Plan of Action appears to have stagnated over the past five years, with significant variation across the regions of the world. Implementation is most advanced in Europe and the Caucasus and in North America, at a moderate level in Africa, Asia, and Latin America and the Caribbean, between low and moderate levels in the Near and Middle East, and at a low level in the Southwest Pacific. There is also substantial variation in the status of implementation among countries within regions. While some countries have achieved high levels of implementation for certain strategic priorities, others remain at the very initial stages of implementation. More than 100 countries reported on their activities, which is a positive outcome, but it also means that approximately 75 countries did not respond. The level of implementation in these non-reporting countries is unknown but is likely to be lower on average than in countries that participated in the reporting process.

Globally, implementation of SPA 3 (Conservation) continues to lag behind that of the other three SPAs. The most frequently cited constraints to the improvement of conservation programmes are resource-related issues, such as inadequate infrastructure and funding (see Annex 2). For instance, cryoconservation, which involves the establishment of a gene bank, requires a substantial initial investment in infrastructure.

Despite the recent stagnation, notable progress has been made globally on some strategic priorities, particularly on raising national awareness (SP 18), strengthening national institutions (SP 12), and completing characterization (SP 1a). These elements are crucial, as they lay the groundwork for the successful implementation of other key areas of the Global Plan of Action. Over the long term, since the first two rounds of reporting in 2012 and 2014, there has been significant progress in the implementation of SPA 4 (Policies, Institutions, and Capacity Building) and in fostering collaboration.

However, in all regions, indicators for the state of collaboration, and especially for the state of funding, show lower levels of implementation than to the indicators for the SPAs themselves. Financial constraints remain the most frequently mentioned obstacles to the implementation of the Global Plan of Action. It is plausible that the reported decline in funding by countries is contributing to the observed stagnation in the implementation of the Global Plan of Action.

The regional progress reports show varying levels of activity, depending on the operational modalities and funding of the respective organizations. Each of the three organization reported activities in the four SPAs of the Global Plan of Action. AU-IBAR and ERFP in particular reported substantial progress in the establishment and improvement of regional gene banks and gene bank networks. Activities related to strengthening collaboration and awareness raising were also frequently mentioned by the three organizations.

International organizations continue to make significant contributions to the implementation of a wide range of aspects of the Global Plan of Action. The activities of these organizations cover the four SPAs, with a particular focus on the governance of animal genetic resources. Lack of funding is reported by those organizations to be the main constraints. A few organizations reported on their activities for the first time since FAO began collecting such information in 2012.

This report highlights that the task of improving the management of the world's animal genetic resources for food and agriculture is far from complete. Challenges persist because of insufficient financial resources and limited human capacity. Decision-makers are urged to use the country-level indicators presented in this report to identify SPAs where action is particularly needed. Countries and international organizations with strong expertise in managing animal genetic resources are encouraged to support countries that require assistance.

Annex 1

Overview: Goals, indicators and targets of the Global Plan of Action by strategic priority area (SPA) and implementation and financing (collaboration and financing) and questions used for their calculation

SPA 1 Characterization, inventory and monitoring of trends and associated risks		
SPA 1 Goal	Improved understanding of the status, trends and associated risks, and characteristics of all aspects and components of animal genetic resources, to facilitate and enable decision-making for their sustainable use, development and conservation	
SPA 1 Indicator	The completeness of characterization and inventory and the regularity of monitoring of trends and associated risks	
SPA 1 Target	Increase the completeness of characterization and improve monitoring of trends and associated risks	
SP 1a Goal	Inventory and characterize animal genetic resources, monitor trends and risks associated with them, and establish country-based early-warning and response systems	
SP 1a Indicator	The completeness of characterization	
SP 1a Target	Increase the completeness of characterization	
	Q 2	Which of the following options best describes your country's progress in implementing phenotypic characterization studies covering morphology, performance, location, production environments and specific features in all livestock species of economic importance (SP 1, Actions 1 and 2)?
	Q 3	Which of the following options best describes your country's progress in molecular characterization of its animal genetic resources covering all livestock species of economic importance (SP 1)?
	Q 10	Is your country conducting research to develop methods, technical standards or protocols for phenotypic or molecular characterization, or breed evaluation, valuation or comparison? (SP 2, Action 2)
SP 1b Goal	Inventory and characterize animal genetic resources, monitor trends and risks associated with them, and establish country-based early-warning and response	
SP 1b Indicator	The completeness of inventory and the regularity of monitoring of trends and associated risks	
SP 1b Target	Increase the completeness of inventory and improve monitoring of trends and associated risks	
	Q 1	Which of the following options best describes your country's progress in building an inventory of its animal genetic resources covering all livestock species of economic importance (SP 1, Action 1)?
	Q 4	Has your country conducted a baseline survey of the population status of its animal genetic resources for all livestock species of economic importance (SP 1, Action 1)?
	Q 5	Have institutional responsibilities for monitoring the status of animal genetic resources in your country been established (SP 1, Action 3)?
	Q 6	Have protocols (details of schedules, objectives and methods) been established for a programme to monitor the status of animal genetic resources in your country (SP 2)?

Q 7 Are the population status and trends of your country's animal genetic resources being monitored regularly for all livestock species of economic importance (SP 1, Action 2)?

Q 8 Which criteria does your country use for assessing the risk status of its animal genetic resources (SP 1, Action 7)

Q 9 Has your country established an operational emergency response system (http://www.fao.org/docrep/meeting/021/K3812e.pdf) that provides for immediate action to safeguard breeds at risk in all important livestock species (SP 1, Action 7)?

Additional questions contributing to SPA 1

Q 11 Has your country identified the major barriers and obstacles to enhancing its inventory, characterization and monitoring programmes?

Q59.A Are there any national NGOs active in your country in the fields of characterization?

SPA 2 Sustainable use and development

SPA 2 Goal Enhanced sustainable use and development of animal genetic resources in all relevant production systems, as a key contribution to achieving sustainable development, poverty eradication and adaptation to the effects of climate change

SPA 2 Indicator The state of sustainable use and development

SPA 2 Target Improve the state of sustainable use and development

SP 3 Establish and strengthen national sustainable use policies

SP 3 Indicator The state of national sustainable use policies

SP 3 Target Improve the state of sustainable use policies

Q 14 Does your country have adequate national policies in place to promote the sustainable use of animal genetic resources?

Q 23 Has your country developed a national policy or entered specific contractual agreements for access to and the equitable sharing of benefits resulting from the use and development of animal genetic resources and associated traditional knowledge (SP 3, Action 2)?

SP 4 Establish national species and breed development strategies and programmes

SP 4 Indicator The state of national species and breed development strategies and programmes

SP 4 Target Improve the state of national species and breed development strategies and programmes

Q 16 Do breeding programmes exist in your country for all major species and breeds, and are these programmes regularly reviewed, and if necessary revised, with the aim of meeting foreseeable economic and social needs and market demands (SP 4, Action 2)?

Q 17 Is long-term sustainable use planning – including, if appropriate, strategic breeding programmes – in place for all major livestock species and breeds (SP 4, Action 1)?

Q 19 Have the long-term impacts of the use of exotic breeds on locally adapted breeds (e.g. economic, environmental or genetic impacts) and on food security been assessed in your country (SP 4, Action 1)?

Q 20 Have recording systems and organizational structures for breeding programmes been established or strengthened (SP 4, Action 3)?

Q 22 Have measures been implemented in your country to provide farmers and livestock keepers with information that facilitates their access to animal genetic resources (SP 4, Action 7)?

Q 24 Have training and technical support programmes for the breeding activities of livestock-keepers been established or strengthened in your country (SP 4, Action 1)?

Q 25 Have priorities for future technical training and support programmes to enhance the use and development of animal genetic resources in your country been identified (SP 4, paragraph 42)?

SP 5 Promote agro-ecosystems approaches to the management of animal genetic resources

SP 5 Indicator The state of efforts to promote agro-ecosystems approaches to the management of animal genetic resources

SP 5 Target Increase efforts to promote agro-ecosystems approaches to the management of animal genetic resources

Q 15 Do these policies address the integration of agro-ecosystem approaches into the management of animal genetic resources in your country (SP 5) (see also questions 46 and 54)?

Q 21 Are mechanisms in place in your country to facilitate interactions among stakeholders, scientific disciplines and sectors as part of sustainable use development planning (SP 5, Action 3)?

SP 6 Support indigenous and local production systems and associated knowledge systems of importance to the maintenance and sustainable use of animal genetic resources

SP 6 Indicator The state of efforts to support indigenous and local production systems and associated knowledge systems of importance to the maintenance and sustainable use of animal genetic resources

SP 6 Target Increase efforts to support indigenous and local production systems and associated knowledge systems of importance to the maintenance and sustainable use of animal genetic resources

Q 26 Have efforts been made in your country to assess and support indigenous or local production systems and associated traditional knowledge and practices related to animal genetic resources (SP 6, Action 1, 2)?

	Q 27	Have efforts been made in your country to promote products derived from indigenous and local species and locally adapted breeds, and facilitate access to markets (SP 6, Action 2, 4)?

Additional questions contributing to SPA 2

	Q 18	Have the major barriers and obstacles to enhancing the sustainable use and development of animal genetic resources in your country been identified?
	Q 59.B	Are there any national NGOs active in your country in the fields of sustainable use and development?

SPA 3 Conservation

SPA 3 Goal	Secure the diversity and integrity of the genetic base of animal genetic resources by better implementing and harmonizing measures to conserve these resources, both in situ and ex situ, including in the context of emergencies and disasters	
SPA 3	The state of conservation	
SPA 3	Improve the state of conservation	
SP 7	Establish national conservation policies	
SP 7 Indicator	The state of national conservation policies	
SP 7 Target	Improve the state of national conservation policies	
	Q 32	Does your country have conservation policies and programmes in place to protect locally adapted breeds at risk in all important livestock species (SP 7, SP 8 and SP 9)?
SP 8	Establish or strengthen in situ conservation programmes	
SP 8 Indicator	The state of in situ conservation programmes	
SP 8 Target	Improve the state of in situ conservation programmes	
	Q 34	Does your country have in situ conservation measures in place for locally adapted breeds at risk of extinction and to prevent breeds from becoming at risk (SP 8 and SP 9)?
SP 9	Establish or strengthen ex situ conservation programmes	
SP 9 Indicator	The state of ex situ conservation programmes	
SP 9 Target	Improve the state of ex situ conservation programmes	
	Q 35	Does your country have ex situ in vivo conservation measures in place for locally adapted breeds at risk of extinction and to prevent breeds from becoming at risk (SP 8 and SP 9)?
	Q 36	Does your country have ex situ in vitro conservation measures in place for locally adapted breeds at risk of extinction and to prevent breeds from becoming at risk (SP 8 and SP 9)?
	Q 42	Are arrangements in place in your country for extraction and use of conserved genetic material following loss of animal genetic resources (e.g. through disasters), including arrangements to enable restocking (SP 9, Action 3)?

Additional questions contributing to SPA 3

Q 30	Does your country regularly assess factors leading to the erosion of its animal genetic resources (SP 7, Action 2)?
Q 39	Has your country identified the major barriers and obstacles to enhancing the conservation of its animal genetic resources?
Q 41	Are arrangements in place in your country to protect breeds and populations that are at risk from natural or human-induced disasters (SPA 3)?
Q 43	Is your country conducting research to adapt existing, or develop new, methods and technologies for in situ and ex situ conservation of animal genetic resources (SP 11, Action 1)?
Q 44	Does your country implement programmes to promote documentation and dissemination of knowledge, technologies and best practices for conservation (SP 11, Action 2)?
Q59.C	Are there any national NGOs active in your country in the fields of conservation of breeds at risk?

SPA 4 Policies, institutions and capacity-building

SPA 4 Goal	Established cross-cutting policies and legal frameworks, and strong institutional and human capacities to achieve successful medium- and long-term planning for livestock sector development, and the implementation of national programmes for the long-term
SPA 4 Indicator	The state of national policies and legal frameworks and efforts to strengthen institutional and human capacities
SPA 4 Target	Improve the state of national policies and legal frameworks and increase efforts to strengthen institutional and human capacities
SP 12	Establish or strengthen national institutions, including national focal points, for planning and implementing animal genetic resources measures, for livestock sector development
SP 12 Indicator	The state of efforts to strengthen national institutions for planning and implementing animal genetic resources measures
SP 12 Target	Increase efforts to strengthen national institutions for planning and implementing animal genetic resources measures

Q 47	Does your country have sufficient institutional capacity to support holistic planning of the livestock sector (SP 12, Action 1)?
Q 53	Has your country established a National Advisory Committee for Animal Genetic Resources (SP 12, Action 3)?
Q 54	Is there strong coordination and interaction between the National Focal Point and stakeholders involved with animal genetic resources, such as the breeding industry, livestock keepers, government agencies, research institutes and civil society organizations (SP 12, Action 3)?

SP 13	Establish or strengthen national educational and research facilities
SP 13 Indicator	The state of efforts to strengthen national educational and research facilities
SP 13 Target	Increase efforts to strengthen national educational and research facilities
	Q 60 Has your country established or strengthened research or educational institutions in the field of animal genetic resources management (SP 13, Action 3)?
SP 14	Strengthen national human capacity for characterization, inventory, and monitoring of trends and associated risks, for sustainable use and development, and for conservation
SP 14 Indicator	The state of efforts to strengthen national human capacity for characterization, inventory, and monitoring of trends and associated risks, for sustainable use and development, and for conservation
SP 14 Target	Increase efforts to strengthen national human capacity for characterization, inventory, and monitoring of trends and associated risks, for sustainable use and development, and for conservation
	Q 57 Which of the following options best describes the state of training and technology transfer programmes in your country related to inventory, characterization, monitoring, sustainable use, development and conservation of animal genetic resources (SP 14, Action 1)?
	Q 58 Have organizations (including where relevant community-based organizations), networks and initiatives for sustainable use, breeding and conservation been established or strengthened (SP 14, Action 3)?
SP 18	Raise national awareness of the roles and values of animal genetic resources
SP 18 Indicator	The state of efforts to raise national awareness of the roles and values of animal genetic resources
SP 18 Goal	Increase efforts to raise national awareness of the roles and values of animal genetic resources
	Q 55 Does the National Focal Point (or other institutions) undertake activities to increase public awareness of the roles and values of animal genetic resources (SP 18)?
SP 20	Review and develop national policies and legal frameworks for animal genetic resources
SP 20 Indicator	The state of national policies and legal frameworks for animal genetic resources
SP 20 Goal	Improve the state of national policies and legal frameworks for animal genetic resources
	Q 48 What is the current status of your country's national strategy and action plan for animal genetic resources (SP 20)?
	Q 56 Does your country have national policies and legal frameworks for animal genetic resources management (SP 20)?

Additional questions contributing to SPA 4

Q 49	Are animal genetic resources addressed in your country's National Biodiversity Strategy and Action Plan (http://www.cbd.int/nbsap/)?
Q 50	Are animal genetic resources addressed in your country's national livestock sector strategy, plan or policy (or equivalent instrument)?
Q 51	Has your country established or strengthened a national database for animal genetic resources (independent from DAD-IS) (SP 15, Action 4)?
Q 52	Have your country's national data on animal genetic resources been regularly updated in DAD-IS?

Implementation and financing of the Global Plan of Action: Collaboration

Indicator The state of international collaboration for planning and implementing animal genetic resources measures

Target Improve the state of international collaboration for planning and implementing animal genetic resources measures

Q62.A	Has your country established or strengthened international collaboration in (SP 16): Characterization?
Q62.B	Has your country established or strengthened international collaboration in (SP 16): Sustainable use and development?
Q62.C	Has your country established or strengthened international collaboration in (SP 16): Conservation of breeds at risk?
Q63.A	Are there any international NGOs active in your country in the fields of: Characterization?
Q63.B	Are there any international NGOs active in your country in the fields of: Sustainable use and development?
Q63.C	Are there any international NGOs active in your country in the fields of: Conservation of breeds at risk?
Q 66	Has your country supported or participated in international research and education programmes assisting developing countries and countries with economies in transition to better manage animal genetic resources (SP 15 and 16)?
Q 67	Has your country supported or participated in programmes aimed at assisting developing countries and countries with economies in transition to obtain training and technologies and to build their information systems (SP 15 and 16)?
Q 69	Has your country contributed to international cooperative inventory, characterization and monitoring activities involving countries sharing transboundary breeds and similar production systems (SP 1, Action 5)?
Q 70	Has your country contributed to establishing or strengthening global or regional information systems or networks related to inventory, monitoring and characterization of animal genetic resources (SP 1, Action 6)?

	Q 71	Has your country contributed to the development of international technical standards and protocols for characterization, inventory and monitoring of animal genetic resources (SP 2)?
	Q 72	Has your country contributed to the development and implementation of regional in situ conservation programmes for breeds that are at risk (SP 8, Action 2; SP 10, Action 1)?
	Q 73	Has your country contributed to the development and implementation of regional ex situ conservation programmes for breeds that are at risk (SP 9, Action 2; SP 10, Action 3; SP 10, Action 4)?
	Q 74	Has your country contributed to the establishment of fair and equitable arrangements for the storage, access and use of genetic material stored in supra-national ex situ gene banks (SP 9, Action 3)?
	Q 75	Has your country participated in regional or international campaigns to raise awareness of the status of animal genetic resources (SP 19)?
	Q 76	Has your country participated in reviewing or developing international policies and regulatory frameworks relevant to animal genetic resources (SP 21)?

Implementation and financing of the Global Plan of Action: Funding

Indicator	The state of funding for the conservation, sustainable use and development of animal genetic resources	
Target	Improve the state of funding for the conservation, sustainable use and development of animal genetic resources	
	Q 64	Has national funding for animal genetic resources programmes increased since the adoption of the GPA?
	Q 65	Has your country received external funding for implementation of the GPA?
	Q 68	Has your country provided funding to other countries for implementation of the Global Plan of Action?

Annex 2

Graphical summaries of the responses to each question, overall and according to region.

Questions are discussed in sections, according to SPA. Within each SPA, the questions are grouped according to the strategic priority-level indicator to which they contribute. Questions that contribute to the respective SPA-level indicator but not to a specific strategic priority indicator follow at the end of each section.

The questions from the questionnaire are used as the figure titles, and for ease of reference, the question numbers used in the questionnaire are also shown. In the figures, the multiple-choice answers from the questionnaire are shortened for clarity of presentation. Responses are presented globally and by region. The number of reporting countries in each region is presented on the right side of each figure.

Strategic priority areas, collaboration and funding

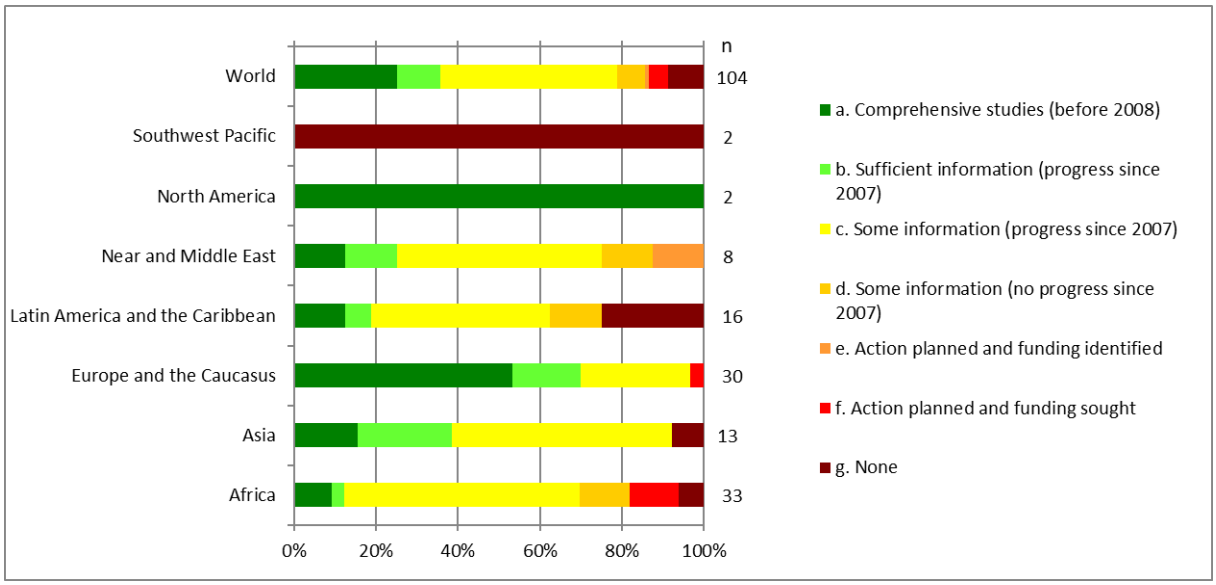
Strategic Priority Area 1: Characterization, inventory and monitoring of trends and associated risks

Long-term goal: Improved understanding of the status, trends and associated risks, and characteristics of all aspects and components of animal genetic resources, to facilitate and enable decision-making for their sustainable use, development and conservation.

SP 1: Inventory and characterize animal genetic resources, monitor trends and risks associated with them, and establish country-based early-warning and response systems

Indicator SP 1a: The completeness of characterization.

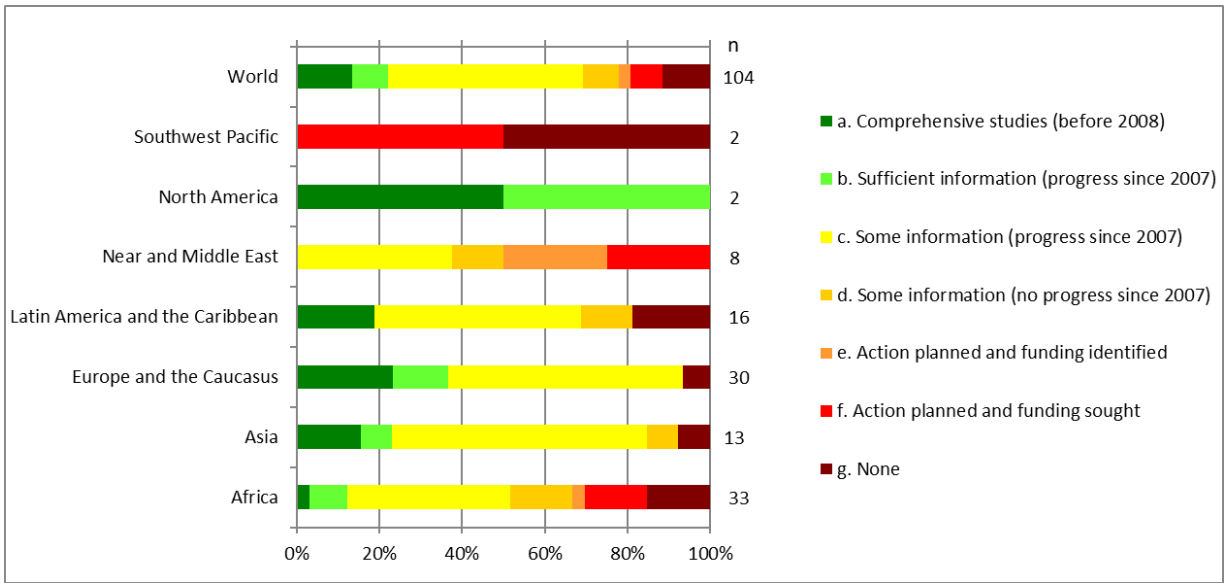
Figure A2.1 Q2. Which of the following options best describes your country's progress in implementing phenotypic characterization studies covering morphology, performance, location, production environments and specific features in all livestock species of economic importance (SP 1, Actions 1 and 2)?



Around 80 percent of reporting countries have undertaken at least some phenotypic characterization studies. Around 25 percent of countries report either that comprehensive studies (covering morphology, performance, location, production environments) had been undertaken before 2008 or that by now the information generated is considered sufficient. Outside North America and Europe and the Caucasus, additional studies are, however, required in the majority of countries, particularly in the Southwest Pacific. Even where information is currently considered sufficient, further studies may be necessary in the future if significant changes to production environments occur.

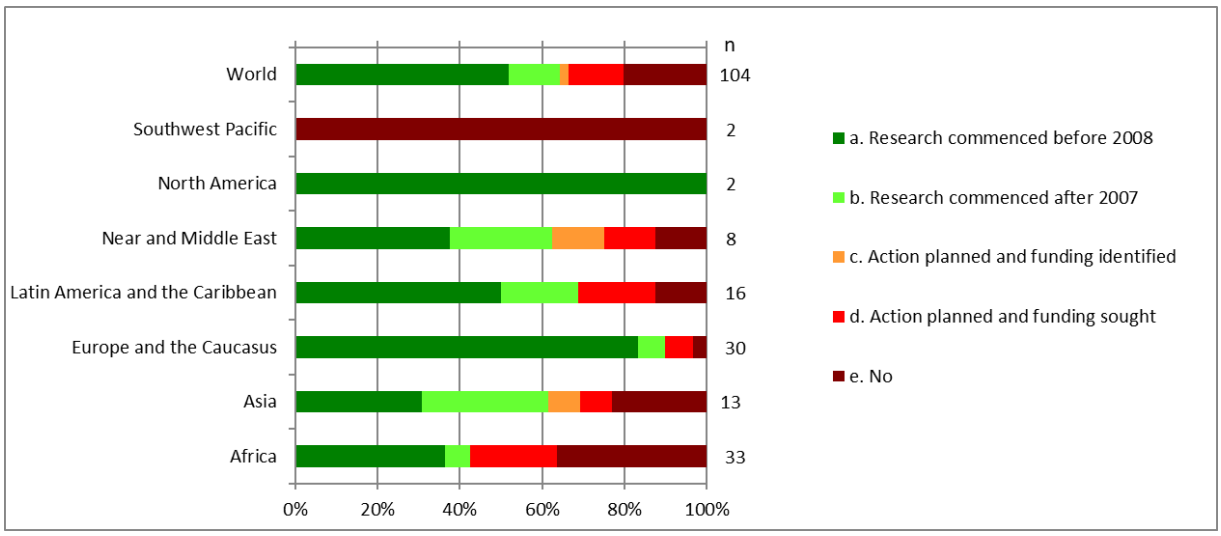
Countries in various regions – developed and less developed – report that phenotypic characterization work is undertaken mostly by research organization and universities, and to a lesser extent, by breeding organizations and non-governmental organizations (NGOs), sometimes as part of FAO-funded projects; 55 percent of countries have made progress in phenotypic characterization studies since the adoption of the Global Plan of Action (in addition to the 25 percent of countries that report comprehensive studies completed before 2008).

Figure A2.2 Q3. Which of the following options best describes your country's progress in molecular characterization of its animal genetic resources covering all livestock species of economic importance (SP 1)?



Approximately 13 percent of reporting countries had undertaken comprehensive molecular characterization studies before the Global Plan of Action was adopted. More than 50 percent have undertaken some molecular studies. Many countries in developing regions report that they have undertaken no molecular characterization studies: about 30 percent in Africa, 50 percent in the Near and Middle East, and 100 percent in the Southwest Pacific. Overall, approximately 79 percent of countries have generated some information from molecular studies before or since 2007. Large ruminants are more frequently mentioned than any other species. Some countries report that a lack of funding has limited their ability to undertake molecular characterization studies.

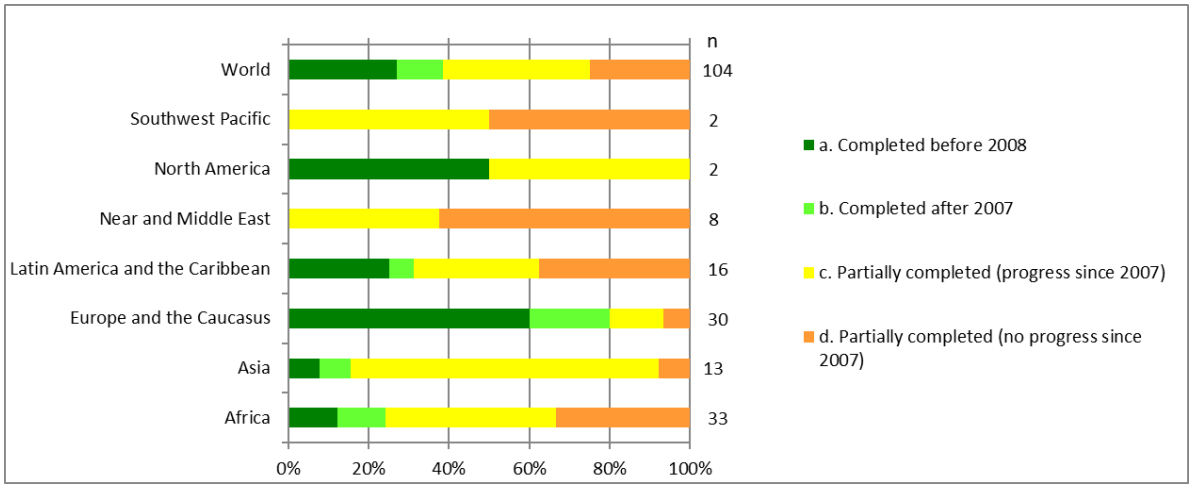
Figure A2.3 Q10. Is your country conducting research to develop methods, technical standards or protocols for phenotypic or molecular characterization, or breed evaluation, valuation or comparison? (SP 2, Action 2)



Approximately 65 percent of reporting countries indicate that they have undertaken research on methods and standards for breed characterization, evaluation, valuation or comparison. More than 50 percent of countries commenced these studies before the adoption of the Global Plan of Action, while around 13 percent commenced studies after 2007. Research activities in this field are most widespread in North America, and Europe and the Caucasus.

Indicator SP 1b: The completeness of inventory and the regularity of monitoring of trends and associated risks

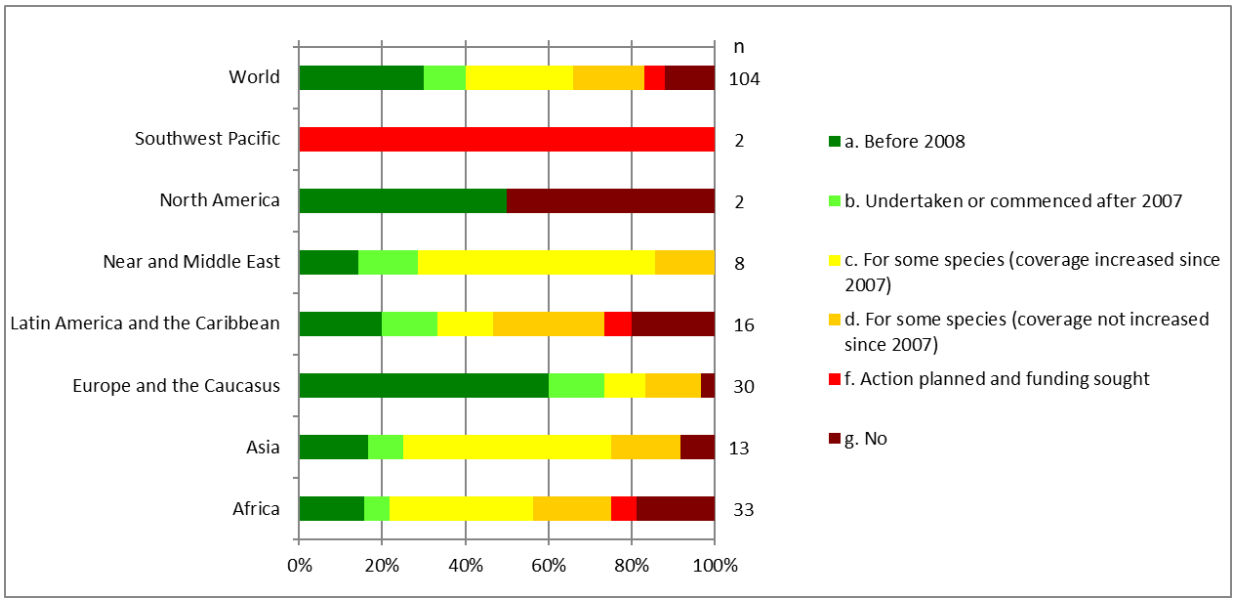
Figure A2.4 Q1. Which of the following options best describes your country's progress in building an inventory of its animal genetic resources covering all livestock species of economic importance (SP 1, Action 1)?



Approximately 30 percent of reporting countries had built an inventory of their animal genetic resources covering all livestock species of economic importance before the adoption of the Global Plan of Action. Among the remaining countries, the majority have either completed or made progress towards completing their inventories since 2007. However, 100 percent of the reporting countries from the Southwest Pacific and the Near and Middle East have only partially completed their inventories, with approximately 50 percent and 40 percent, respectively, indicating progress since 2007.

Several countries indicate that they use the livestock census to draw up inventories of their animal genetic resources. Some countries, such as Kenya or Mongolia, report having carried out and published recent inventories of their breeds.

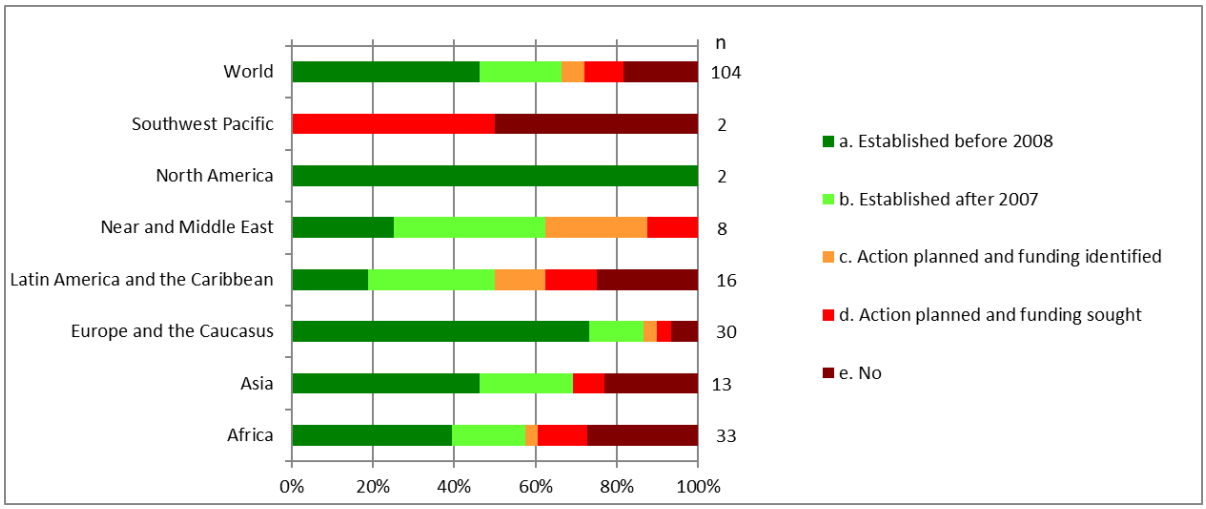
Figure A2.5 Q4. Has your country conducted a baseline survey of the population status of its animal genetic resources for all livestock species of economic importance (SP 1, Action 1)?



Approximately 40 percent of reporting countries have conducted a baseline survey of the population status of their animal genetic resources for all livestock species of economic importance.

For all regions except Europe and the Caucasus and North America, there is a general need for substantial further efforts to complete baseline surveys. This shortfall is reflected in the many gaps that still exist in the population data inserted by countries into the Domestic Animal Diversity Information System (DAD-IS).[48] For further information, see *Status and trends of animal genetic resources – 2024*.[49] Several countries note that that surveying activities are constrained by a lack of funds.

Figure A2.6 Q5. Have institutional responsibilities for monitoring the status of animal genetic resources in your country been established (SP 1, Action 3)?



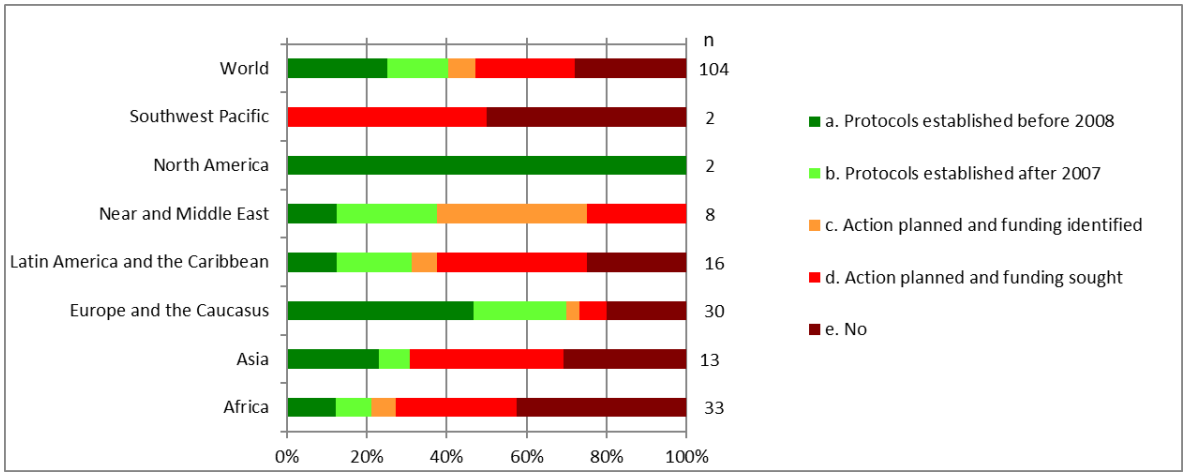
More than 65 percent of reporting countries have established institutional responsibilities for monitoring the status of their animal genetic resources. However, reporting countries from the Southwest Pacific have not yet established institutional responsibilities for monitoring.

Several different institutional arrangements are reported. For instance, responsibility may be assigned

[48] http://www.fao.org/dad-is/
[49] CGRFA/WG-AnGR-13/24/4/Inf.1

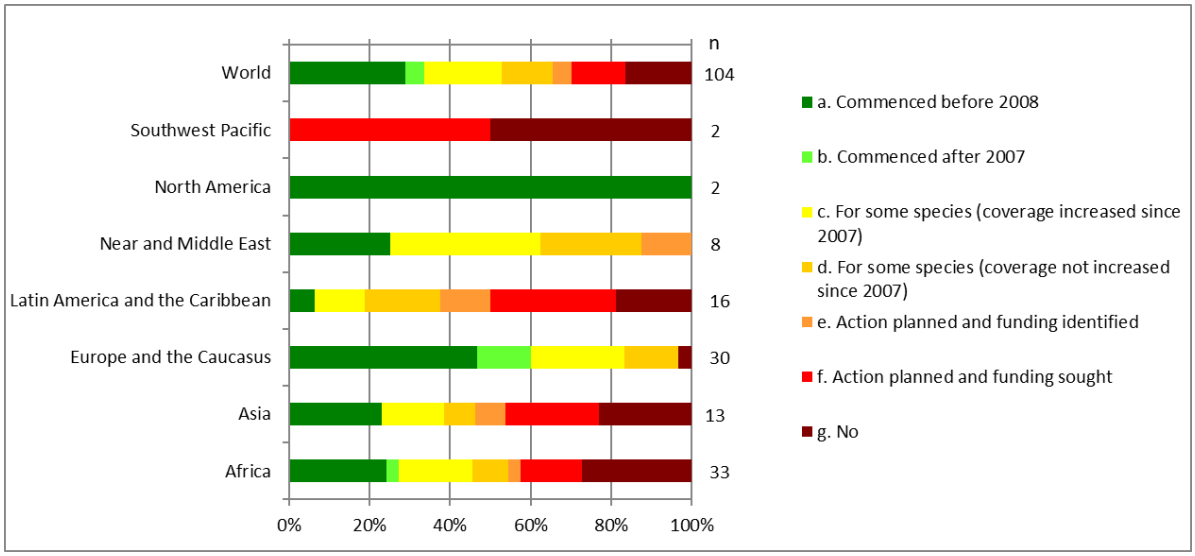
to government agencies, research institutes, breeding organizations or NGOs, with the possible involvement of a national advisory committee. In many countries, different stakeholders are responsible for monitoring different animal species or breeds. Canada, for example, reports the existence of a national registration system for all species except poultry, which are monitored by breeders' associations.

Figure A2.7 Q6. Have protocols (details of schedules, objectives and methods) been established for a programme to monitor the status of animal genetic resources in your country (SP 2)?



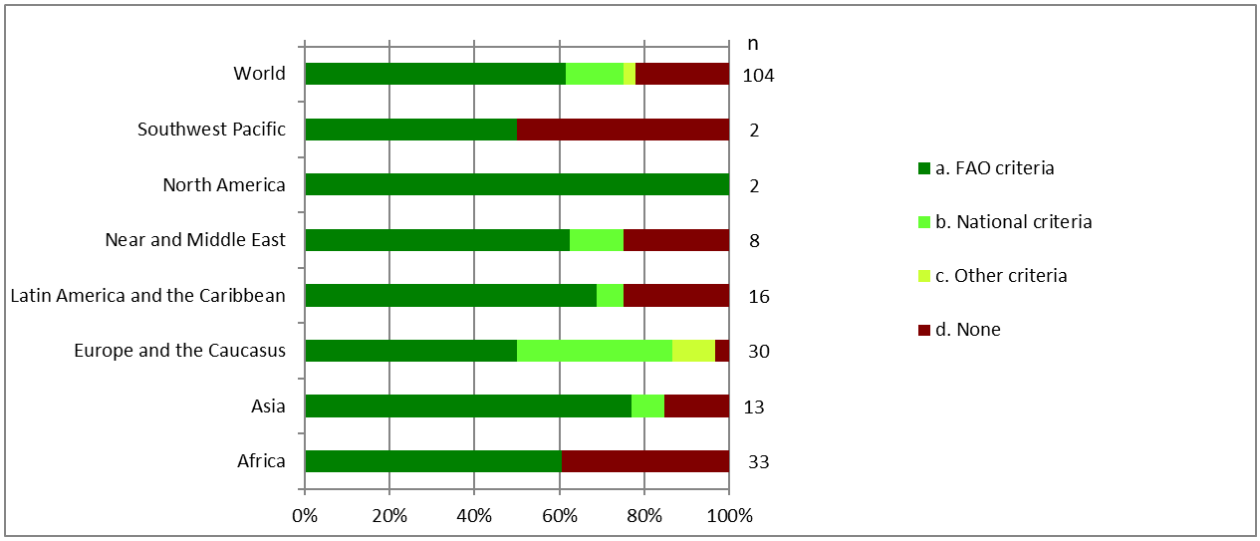
More than 40 percent of reporting countries have established protocols (details of schedules, objectives and methods) for programmes for monitoring the status of their animal genetic resources. More than half of these countries had established their protocols before the adoption of the Global Plan of Action. Protocols for monitoring are still lacking in most regions outside North America, and Europe and the Caucasus.

Figure A2.8 Q7. Are the population status and trends of your country's animal genetic resources being monitored regularly for all livestock species of economic importance (SP 1, Action 2)?



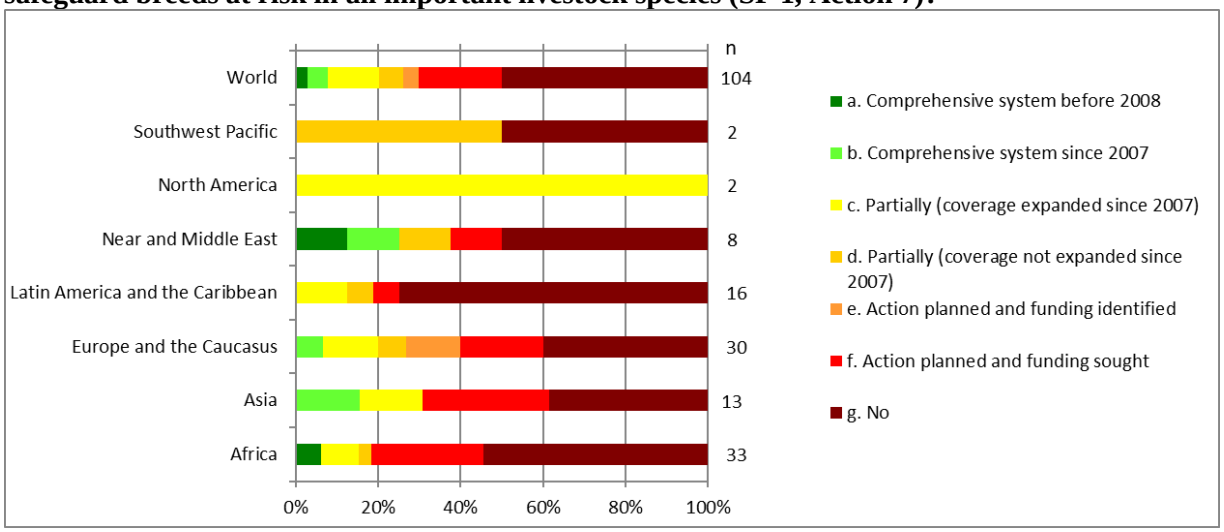
More than 30 percent of reporting countries have commenced regular monitoring of the population status and trends of their animal genetic resources in all livestock species of economic importance. Action is particularly required in regions other than North America, and Europe and the Caucasus. Some countries report that monitoring is carried out or could be carried out by means of a livestock census, provided it includes a "breed" component. However, this is rarely the case, as highlighted by countries such as the Cook Islands, Eswatini, Ghana, Pakistan and Yemen.

Figure A2.9 Q8. Which criteria does your country use for assessing the risk status of its animal genetic resources (SP 1, Action 7)?



Almost 80 percent of reporting countries have criteria for assessing the risk status of their animal genetic resources. FAO criteria are the most widely used. However, 50 percent of the countries in the Southwest Pacific and approximately 40 percent of those in Africa do not use any criteria to assess the risk status of their animal genetic resources. Several European countries reported that they use, among other parameters, indicators linked to effective population size.

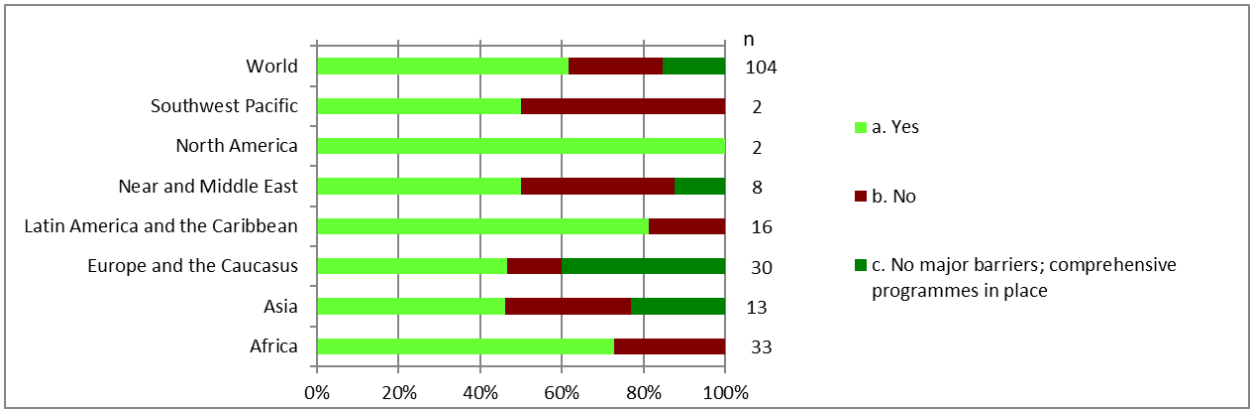
Figure A2.10 Q9. Has your country established an operational emergency response system (http://www.fao.org/docrep/meeting/021/K3812e.pdf) that provides for immediate action to safeguard breeds at risk in all important livestock species (SP 1, Action 7)?



Less than 10 percent of reporting countries have established an operational emergency response system that provides for immediate action to safeguard breeds at risk in all important livestock species. None of these countries are in Africa, Latin America and the Caribbean, the Near and Middle East, North America or the Southwest Pacific. Substantial further action is required in all regions.

Additional questions contributing to Indicator SPA 1

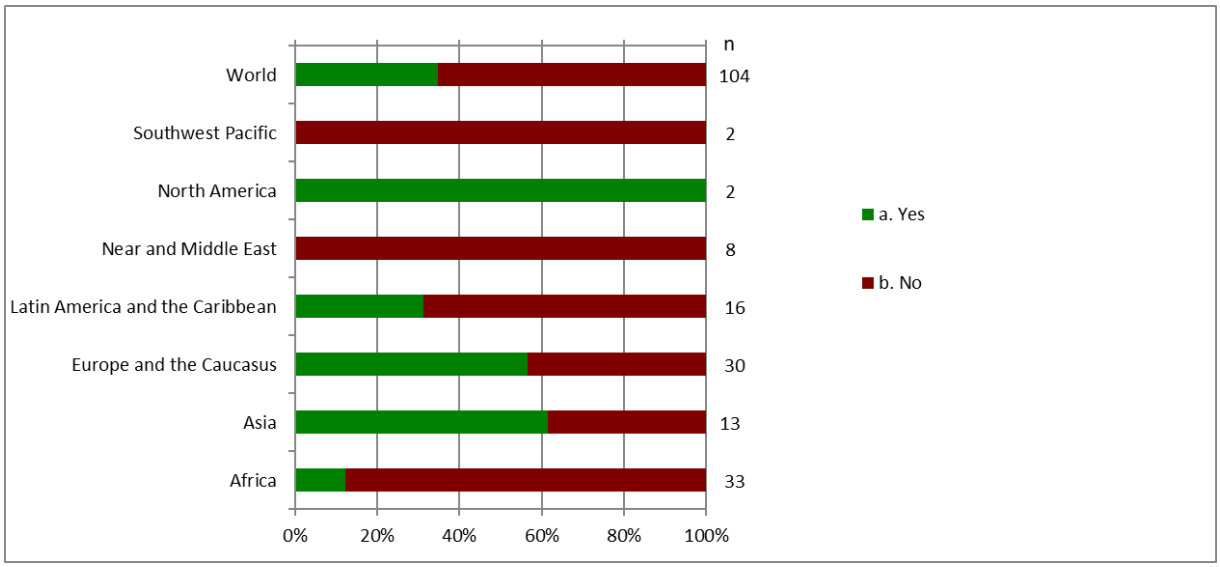
Figure A2.11 Q11. Has your country identified the major barriers and obstacles to enhancing its inventory, characterization and monitoring programmes?



Around 15 percent of countries report that no major barriers or obstacles have been identified because comprehensive characterization and monitoring programmes are already in place. In more than 60 percent of countries, barriers have been identified. More than 20 percent of countries have not yet identified any barriers. This lack of information and analysis is particularly prevalent in the countries of the Near and Middle East and the Southwest Pacific.

When asked to select up to three barriers and obstacles to enhancing inventory, characterization and monitoring programmes (Optional Question 11), 52 percent of countries identified "Lack of funding," and 37 percent selected "Lack of infrastructure and technical resources (including for data management)". The remaining factors were selected by less than 25 percent of countries.

Figure A2.12 Q59. Are there any national NGOs active in your country in the fields of: Characterization?



Approximately 35 percent of reporting countries indicate that national NGOs are active in the field of characterization. NGOs engaged in characterization work are relatively common in Asia, Europe and the Caucasus (around 60 percent of the countries in both regions) and North America (100 percent of countries). In contrast, no country in the Near and Middle East or the Southwest Pacific reports any national NGOs active in the field of characterization.

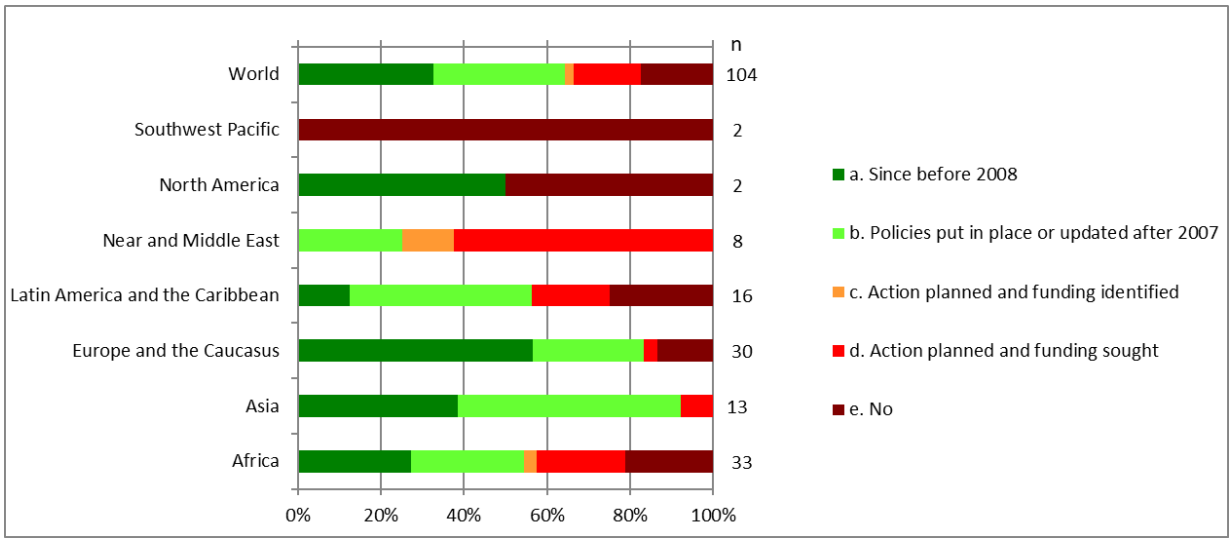
Strategic Priority Area 2: Sustainable use and development

Long-term goal: Enhanced sustainable use and development of animal genetic resources in all relevant production systems, as a key contribution to achieving sustainable development, poverty eradication and adaptation to the effects of climate change.

SP 3: Establish and strengthen national sustainable use policies

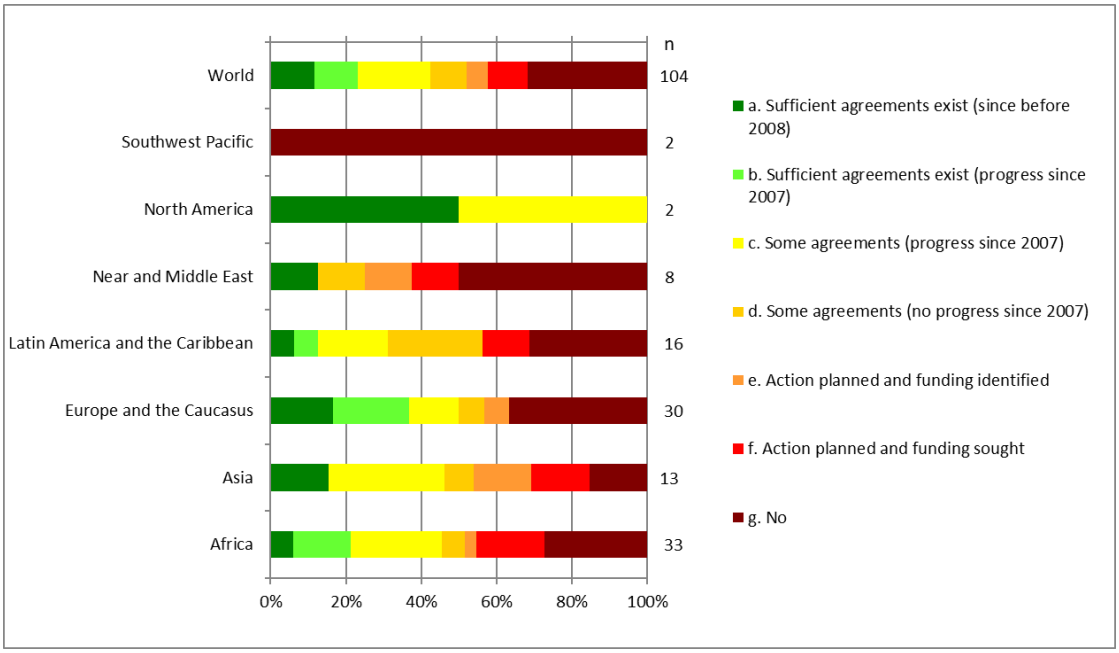
Indicator SP 3: The state of national sustainable use policies

Figure A2.13 Q14. Does your country have adequate national policies in place to promote the sustainable use of animal genetic resources (see also questions 46 and 54)?



Over 65 percent of reporting countries state that they have adequate national policies in place to promote the sustainable use of their animal genetic resources. Half of these report that this level of capacity was established since the adoption of the Global Plan of Action. Many countries, however, still need to establish or strengthen their policies. This is particularly the case in the Near and Middle East and the Southwest Pacific.

Figure A2.14 Q23. Has your country developed a national policy or entered specific contractual agreements for access to and the equitable sharing of benefits resulting from the use and development of animal genetic resources and associated traditional knowledge (SP 3, Action 2)?

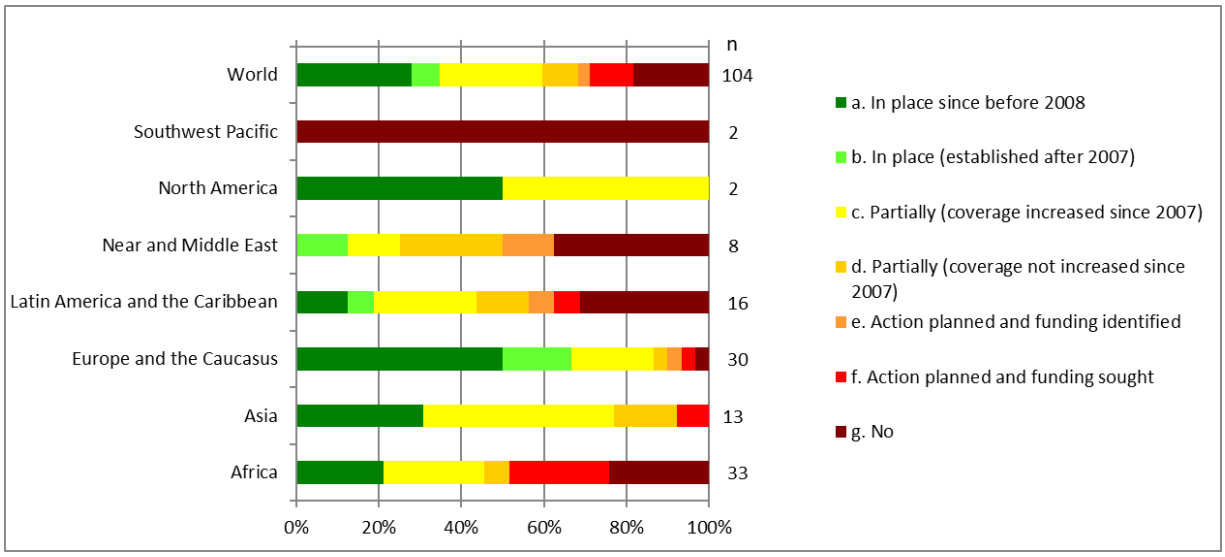


Globally, around 50 percent of reporting countries have not developed any agreements for equitable sharing of benefits resulting from access to and use and development of animal genetic resources and associated traditional knowledge. Only about 25 percent of responding countries regard their policies or agreements as sufficient. Progress is particularly needed in the Southwest Pacific and the Near and Middle East.

SP 4: Establish national species and breed development strategies and programmes

Indicator SP 4: The state of national species and breed development strategies and programmes

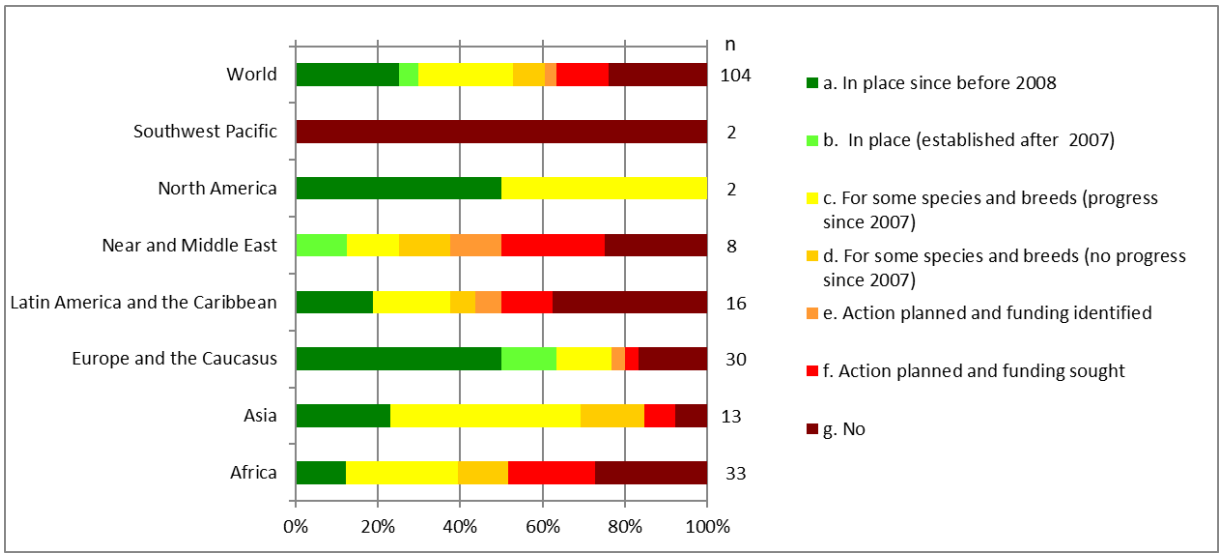
Figure A2.15 Q16. Do breeding programmes exist in your country for all major species and breeds, and are these programmes regularly reviewed, and if necessary revised, with the aim of meeting foreseeable economic and social needs and market demands (SP 4, Action 2)?



Slightly more than 35 percent of responding countries report having breeding programmes in place for all major species and breeds. Almost all these countries had achieved this before the adoption of the Global Plan of Action. Approximately 70 percent of countries report that they have some breeding programmes in place. About half of these have increased their coverage since 2007. Nonetheless, coverage needs to be increased in all regions, especially the Southwest Pacific, the Near and Middle East, Africa and Latin America and the Caribbean.

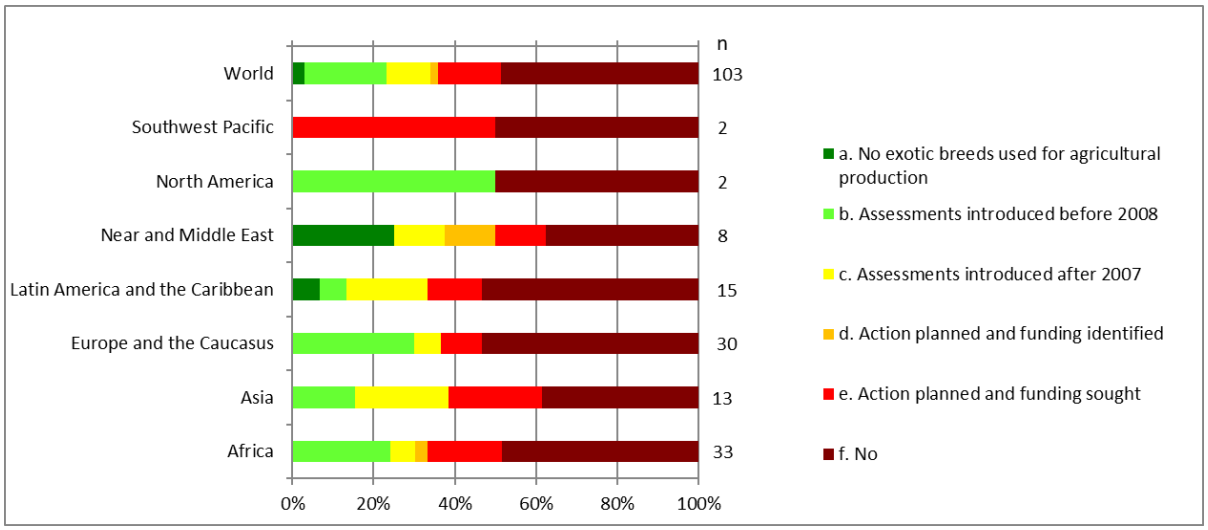
Worldwide, breeders' organizations are the stakeholders most frequently mentioned as being involved in the development, revision and implementation of breeding programmes. Research institutes are also often cited as playing a role in this task, particularly outside Europe and the Caucasus. Several countries report a regular review of their breeding programmes. For example Japan and the Republic of Korea indicate that they review breeding objectives every five years.

Figure A2.16 Q17. Is long-term sustainable use planning – including, if appropriate, strategic breeding programmes – in place for all major livestock species and breeds (SP 4, Action 1)?



Long-term sustainable use planning is in place for all major livestock species and breeds in approximately 30 percent of reporting countries. A similar proportion of countries have measures of this type in place for some species. Gaps are particularly significant in the Southwest Pacific, the Near and Middle East, Latin America and the Caribbean, and Africa.

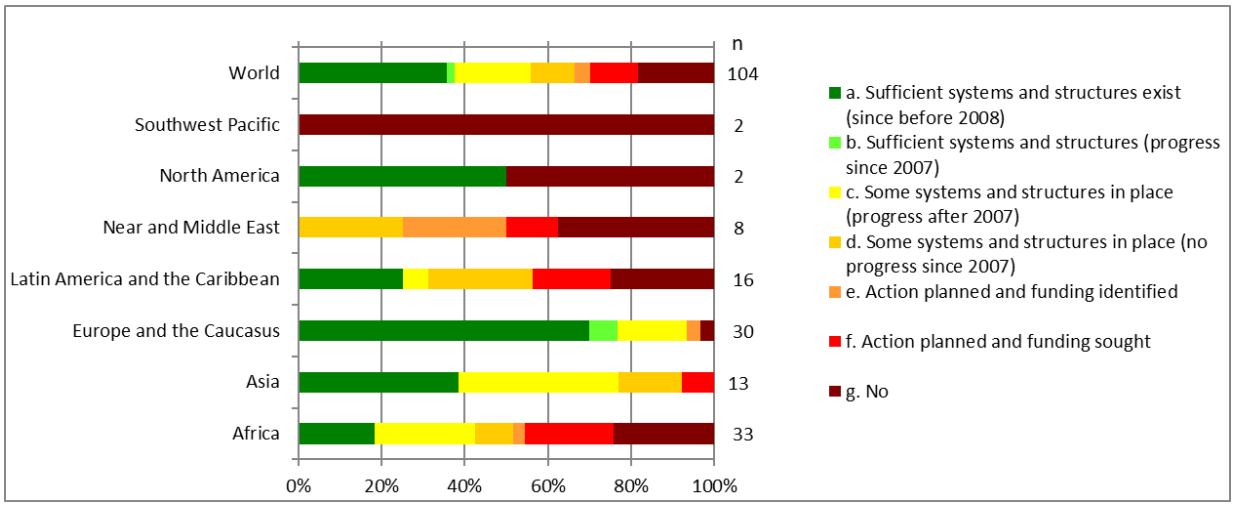
Figure A2.17 Q19. Have the long-term impacts of the use of exotic breeds on locally adapted breeds (e.g. economic, environmental or genetic impacts) and on food security been assessed in your country (SP 4, Action 1)?



Note: due to a technical error, data was considered for only 103 countries

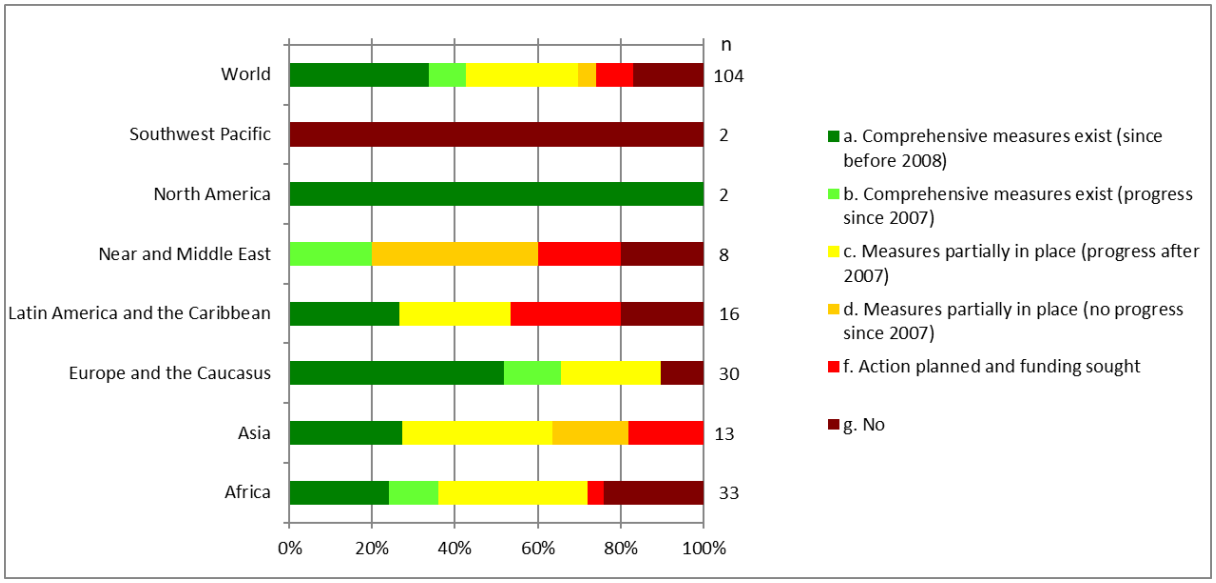
Assessments of the impact of introducing exotic breeds have been undertaken in over 30 percent of reporting countries; this proportion is similar across regions. Several countries highlighted the value of using exotic breeds for food security, while noting the negative effects on local agrobiodiversity. Examples of specific studies were provided by Ethiopia, South Africa and Uganda. Ethiopia also pointed out that the benefits of using exotic breeds can vary depending on the species.

Figure A2.18 Q20. Have recording systems and organizational structures for breeding programmes been established or strengthened (SP 4, Action 3)?



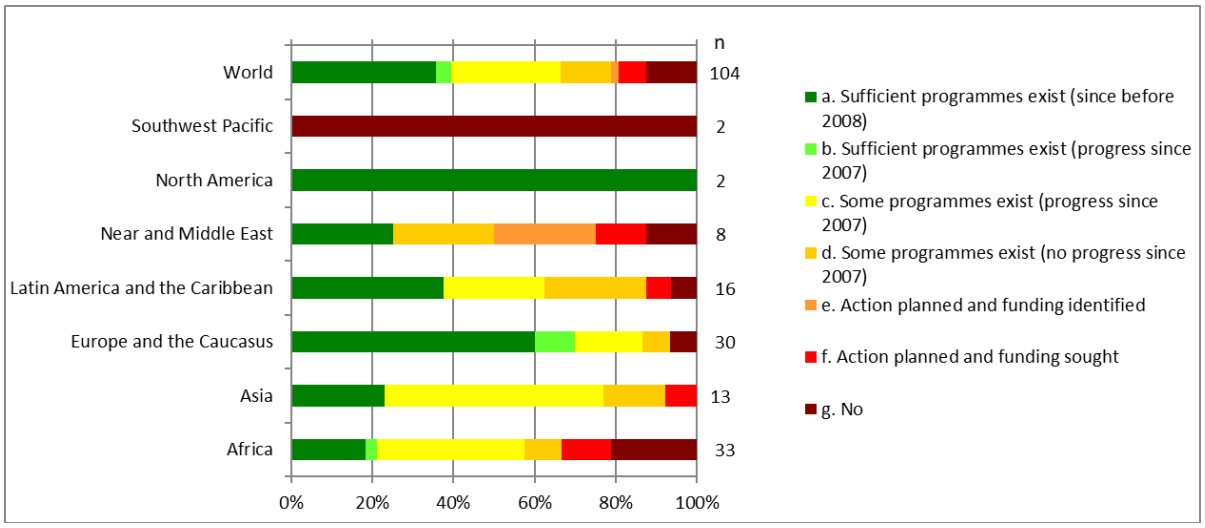
Less than 40 percent of reporting countries consider that they have sufficient recording systems and organizational structures in place for their breeding programmes. Further progress is therefore required in most countries outside of Europe and the Caucasus and North America, especially in the Near and Middle East and the Southwest Pacific.

Figure A2.19 Q22. Have measures been implemented in your country to provide farmers and livestock keepers with information that facilitates their access to animal genetic resources (SP4, Action 7)?



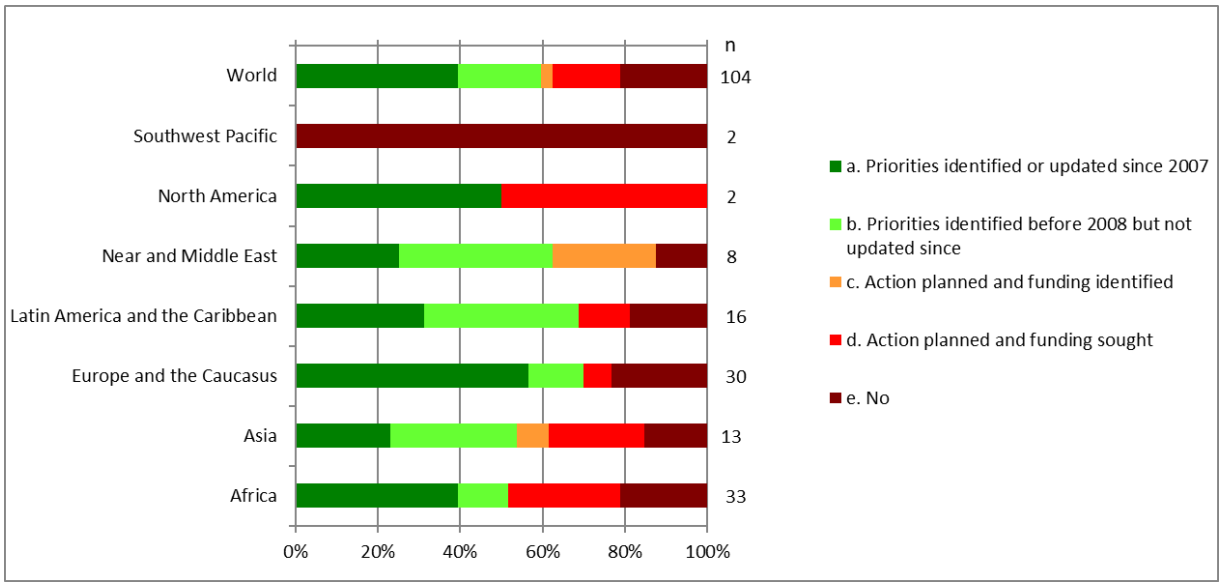
Less than 40 percent of reporting countries have comprehensive measures in place for providing farmers and livestock keepers with information that facilitates their access to genetic resources. Moreover, approximately 20 percent of all countries, and 100 percent of countries in the Southwest Pacific and around 40 percent of those in the Latin and America and the Caribbean, and the Near and Middle East report that they have no such measures in place whatsoever. About 30 percent of countries report that they have made progress in the introduction of such measures since 2007.

Figure A2.20 Q24. Have training and technical support programmes for the breeding activities of livestock-keepers been established or strengthened in your country (SP4, Action 1)?



Almost 40 percent of reporting countries indicate that they have sufficient training and technical support programmes for the breeding activities of livestock-keeping communities in place. Around 80 percent of countries have some programmes of this type. In their questionnaire responses, many countries emphasize the role of extension services, universities, research institutes and NGOs in providing training and technical support to livestock keepers and other stakeholders.

Figure A2.21 Q25. Have priorities for future technical training and support programmes to enhance the use and development of animal genetic resources in your country been identified (SP4, paragraph 42)?



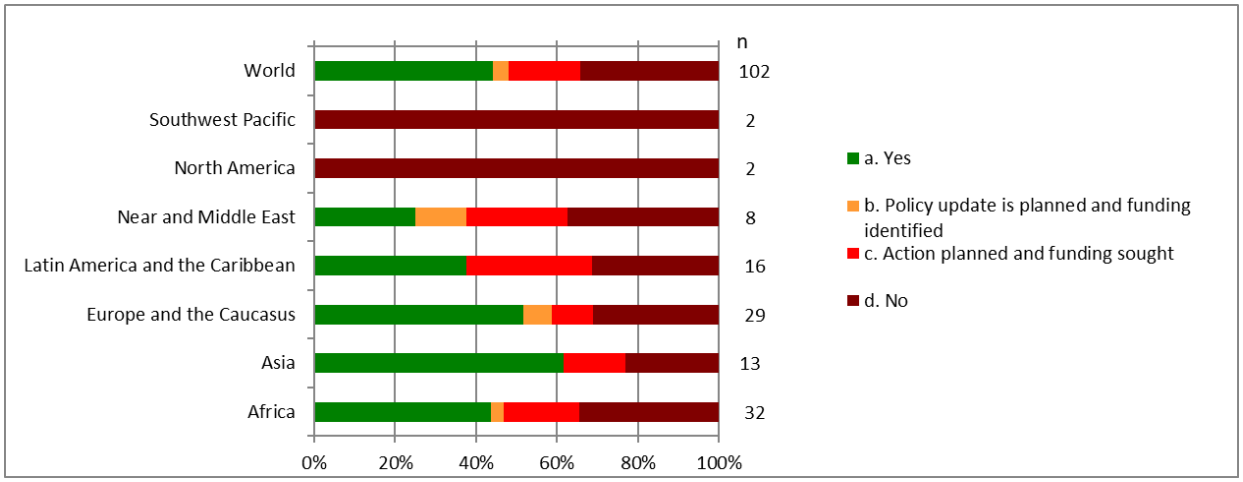
Approximately 60 percent of reporting countries have identified priorities for training and support programmes to enhance the use and development of animal genetic resources, with limited differences across regions, except for the Southwest Pacific, where neither of the two reporting countries indicate that action of this kind has been undertaken. Mexico reports that its future training priorities are defined in its Multi-year Work Program of the Sectoral Committee on Genetic Resources for Food and Agriculture 2022 – 2024.[50]

[50] https://www.gob.mx/cms/uploads/attachment/file/759874/Recursos_geneticos_extendido__1__compressed.pdf

SP 5: Promote agro-ecosystems approaches to the management of animal genetic resources

Indicator SP 5: The state of efforts to promote agro-ecosystems approaches to the management of animal genetic resources

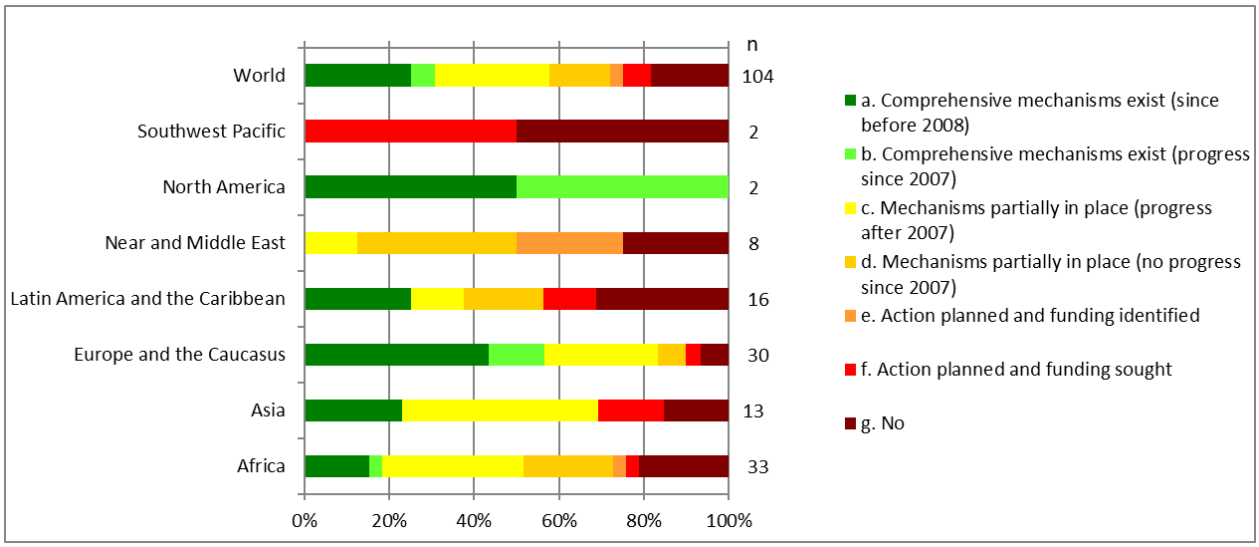
Figure A2.22 Q15. Do these policies address the integration of agro-ecosystem approaches into the management of animal genetic resources in your country (SP 5) (see also questions 46 and 54)?



Note: due to a technical error, data is considered on only 102 countries

More than 40 percent of countries report that they have policies that address the integration of the agroecosystem approach into the management of their animal genetic resources. All countries in both the Southwest Pacific and North America report no activity in this regard. Germany reports that its National Programme on Conservation and Sustainable Use of Animal Genetic Resources recommends utilizing local animal genetic resources for landscape management and ecosystem services.

Figure A2.23 Q21. Are mechanisms in place in your country to facilitate interactions among stakeholders, scientific disciplines and sectors as part of sustainable use development planning (SP 5, Action 3)?

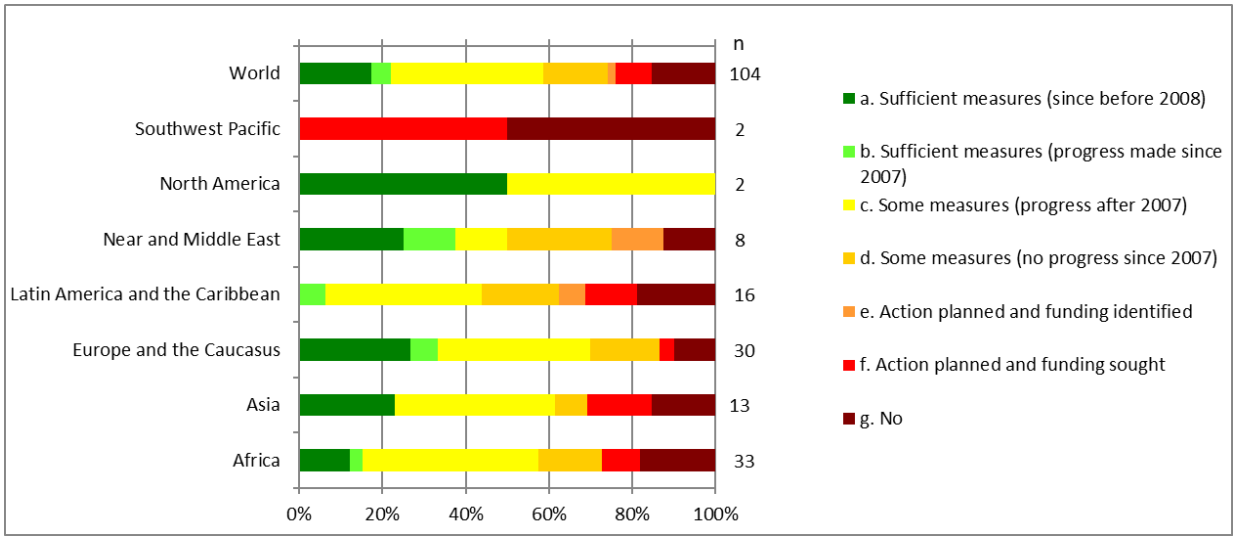


Approximately 30 percent of reporting countries have comprehensive mechanisms in place to facilitate interactions among stakeholders as part of sustainable use planning for animal genetic resources. A further 40 percent, approximately, have at least some such mechanisms in place. The situation has not changed markedly since the 2020 report.

SP 6: Support indigenous and local production systems and associated knowledge systems of importance to the maintenance and sustainable use of animal genetic resources

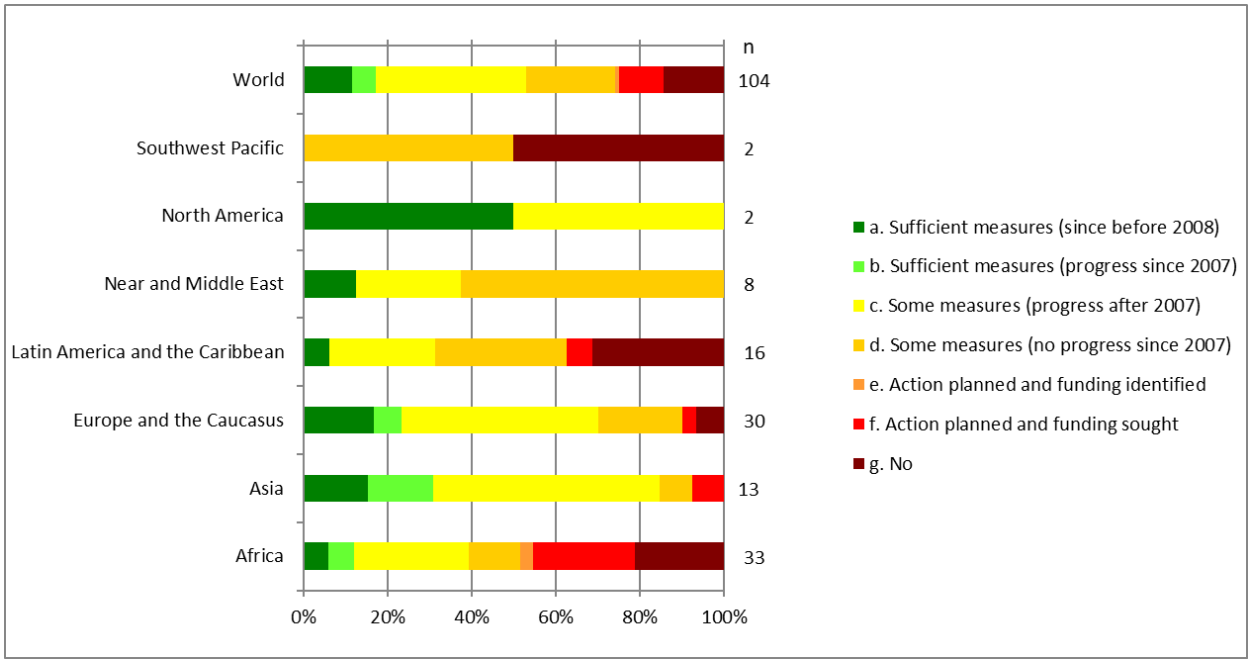
Indicator SP 6: The state of efforts to support indigenous and local production systems and associated knowledge systems of importance to the maintenance and sustainable use of animal genetic resources

Figure A2.24 Q26. Have efforts been made in your country to assess and support indigenous or local production systems and associated traditional knowledge and practices related to animal genetic resources (SP 6, Action 1, 2)?



Approximately 20 percent of reporting countries consider that they have put sufficient measures in place to assess and support indigenous or local production systems and associated traditional knowledge and practices related to animal genetic resources. More than 50 percent report that they have some measures in place. The remaining 25 percent still have no measures in place, but several of them report that they are planning to take some action to address this issue.

Figure A2.25 Q27. Have efforts been made in your country to promote products derived from indigenous and local species and locally adapted breeds, and facilitate access to markets (SP 6, Action 2, 4)?

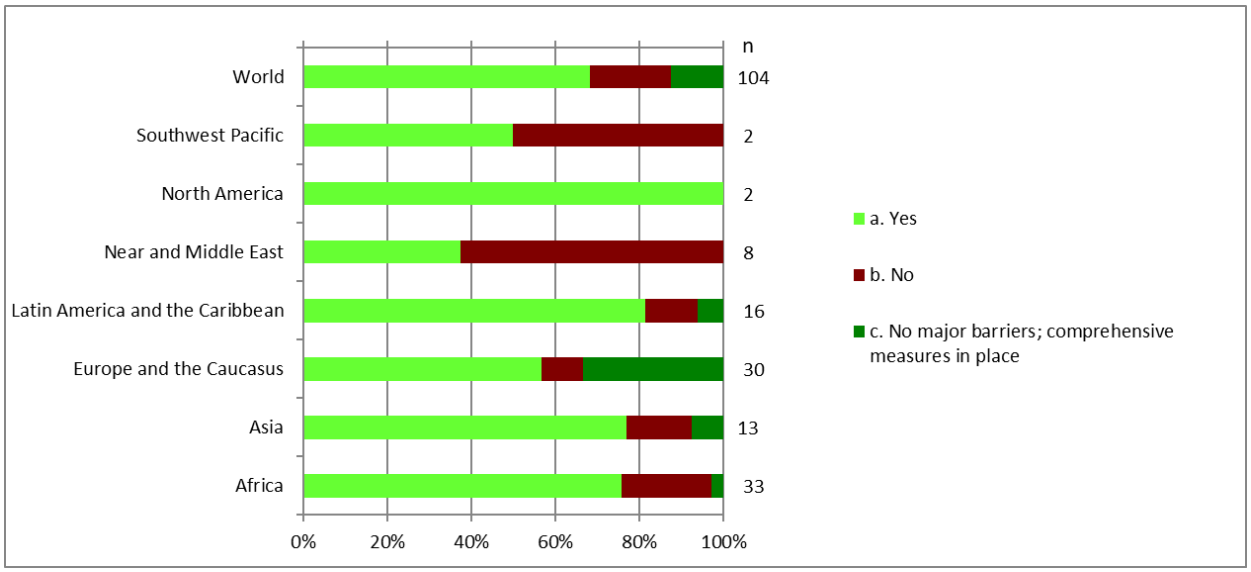


Less than 20 percent of reporting countries consider that their measures for promoting products derived from indigenous and local species and breeds and for promoting access to markets are sufficient, although almost 55 percent of reporting countries have implemented some measures of this type, thus demonstrating awareness of their potential. Almost all regions report progress since the adoption of the Global Plan of Action, with the Southwest Pacific being the exception.

Several countries report the development of specific niche markets or quality certifications, such as Protected Designation of Origin (PDO) or Geographical Indications (GI), to promote products from local or endangered breeds. This includes countries in Europe, such as France, Greece, Italy, Slovenia, Spain and the United Kingdom, as well as countries in other regions, including Bhutan and Saudi Arabia. France highlights that a limited breed population size can be a constraint, as small volumes of breed-related products may be insufficient to support effective marketing systems.

Additional questions contributing to Indicator SPA2

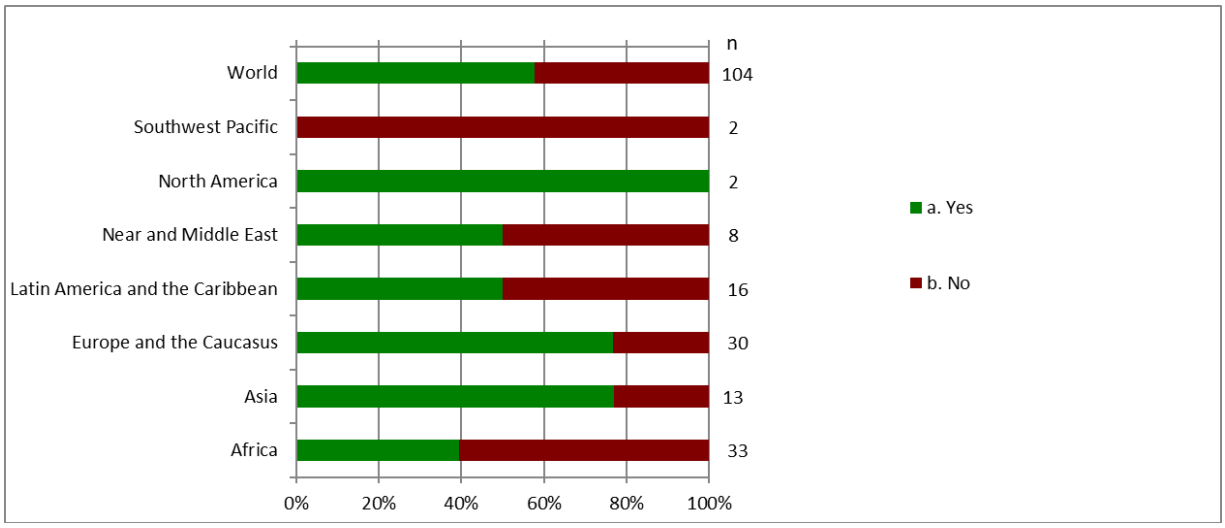
Figure A2.26 Q18. Have the major barriers and obstacles to enhancing the sustainable use and development of animal genetic resources in your country been identified?



About 70 percent of reporting countries have identified the major barriers and obstacles to enhancing the sustainable use and development of their animal genetic resources. An additional 13 percent have no major barriers. No progress seems to have been made in general since 2020. When asked to select up to three barriers and obstacles to enhancing the sustainable use and development of animal genetic resources (Optional Question 18), 51 percent of countries identified “Lack of funding.” The remaining factors were selected by less than 25 percent of countries.

When asked to select up to three priority requirements for enhancing the sustainable use and development of animal genetic resources (Optional Question 28), 59 percent of countries identified “Increased funding”, 38 percent chose “Enhanced human capacity”, and 38 percent chose “Increased awareness on animal genetic resources and their products”. The remaining factors were selected by less than 30 percent of countries.

Figure A2.27 Q59. Are there any national NGOs active in your country in the fields of: Sustainable use and development?



More than 50 percent of reporting countries have national NGOs that are active in the field of sustainable use and development of animal genetic resources. The situation was similar to 2020 for most regions, with the exception of the Near and Middle East, where substantial progress has been made.

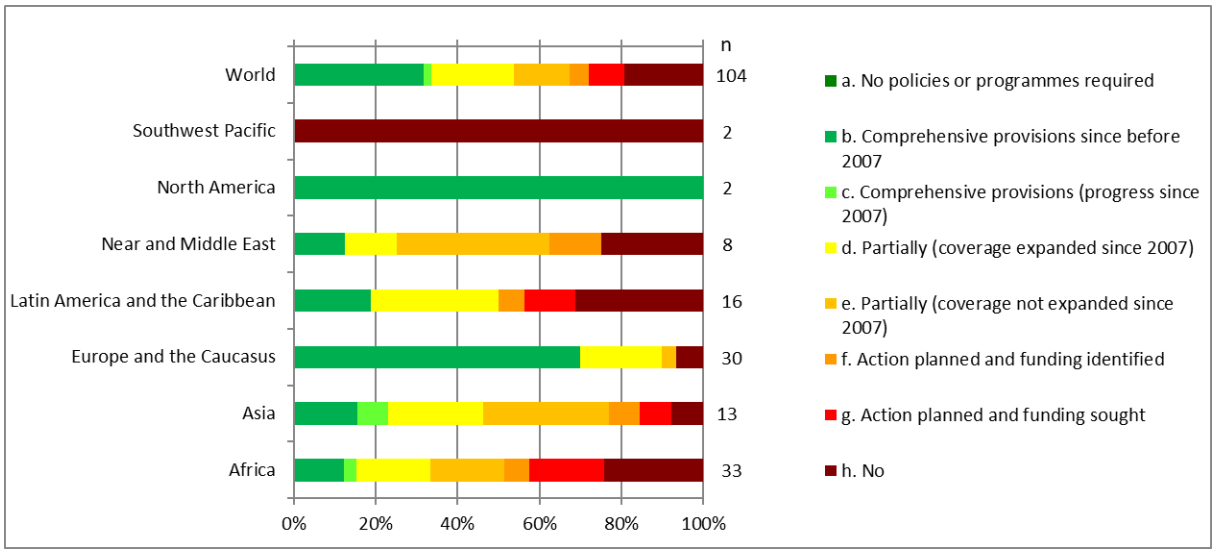
Strategic Priority Area 3: Conservation

Long-term goal: Secure the diversity and integrity of the genetic base of animal genetic resources by better implementing and harmonizing measures to conserve these resources, both *in situ* and *ex situ*, including in the context of emergencies and disasters.

SP 7: Establish national conservation policies

Indicator SP 7: The state of national conservation policies

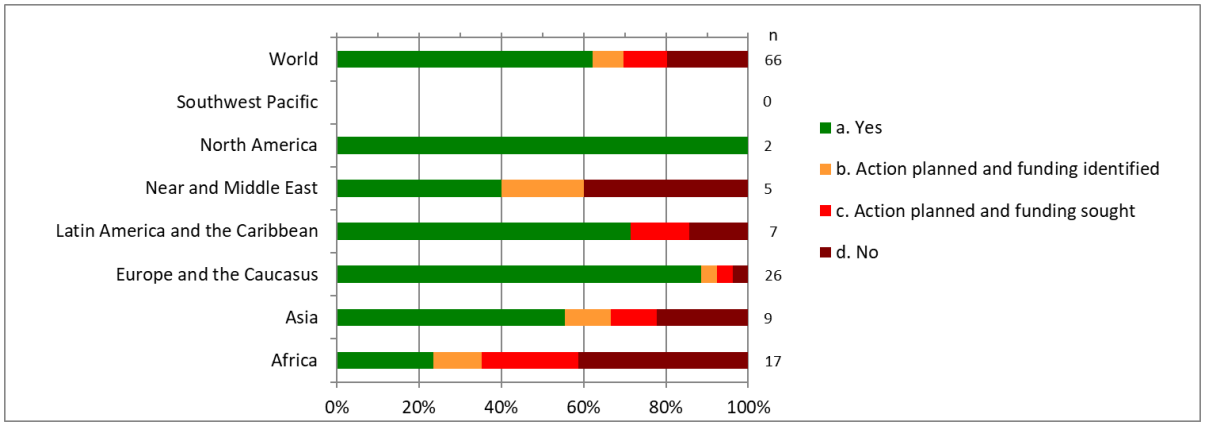
Figure A2.28 Q32. Does your country have conservation policies and programmes in place to protect locally adapted breeds at risk in all important livestock species (SP 7, SP 8 and SP 9)?



For the questions related to conservation policies and programmes, countries had the option of indicating that they have no such provisions in place because all their locally adapted breeds are secure (and hence additional conservation measures are unnecessary). However, no country chose this response.

Approximately 35 percent of reporting countries considered that they have comprehensive conservation policies and programmes in place to protect breeds at risk in all important livestock species. Partial coverage was reported by an additional 35 percent of countries. In 2020, the sum across both responses was 80 percent, indicating a small decline over the intervening period. The level of coverage varies from region to region, with North America and Europe and the Caucasus being the only regions where a majority of countries report that comprehensive policies and programmes are in place.

Figure A2.29 Q33. If conservation policies and programmes are in place, are they regularly evaluated or reviewed (SP 7, Action 1; SP 8, Action 1; and SP 9, Action 1)?



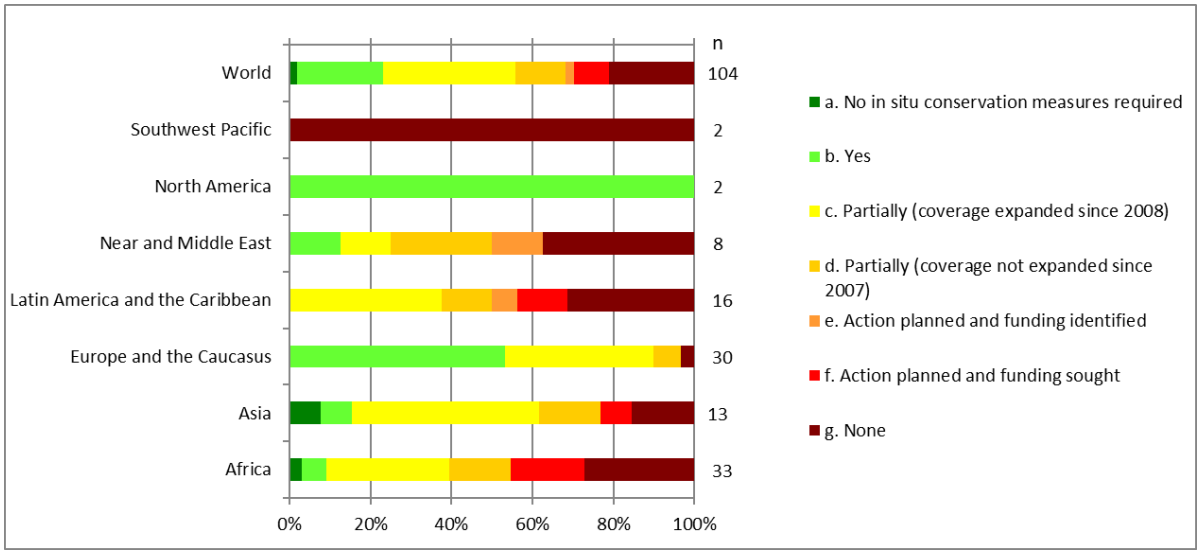
This question is not considered in the calculation of the indicator because it was only addressed to the subset of countries responding positively to Question 32. In more than 60 percent of reporting countries that have conservation programmes, these programmes are evaluated or reviewed regularly. Regular evaluations and revisions are rare in some regions, including Africa and the Near and Middle East.

The pace of evaluation and revision varies from policy to policy and from country to country. For example, the Republic of Korea reports that the basic plan and the implementation plan of its Agricultural Bioresources Act are evaluated and revised every five years and every year, respectively. Oman reports that certain laws and decisions have been reassessed in response to the impacts of climate change.

SP 8: Establish or strengthen in situ conservation programmes

Indicator SP 8: The state of in situ conservation programmes

Figure A2.30 Q34. Does your country have *in situ* conservation measures in place for locally adapted breeds at risk of extinction to prevent breeds from becoming at risk (SP 8 and SP 9)?



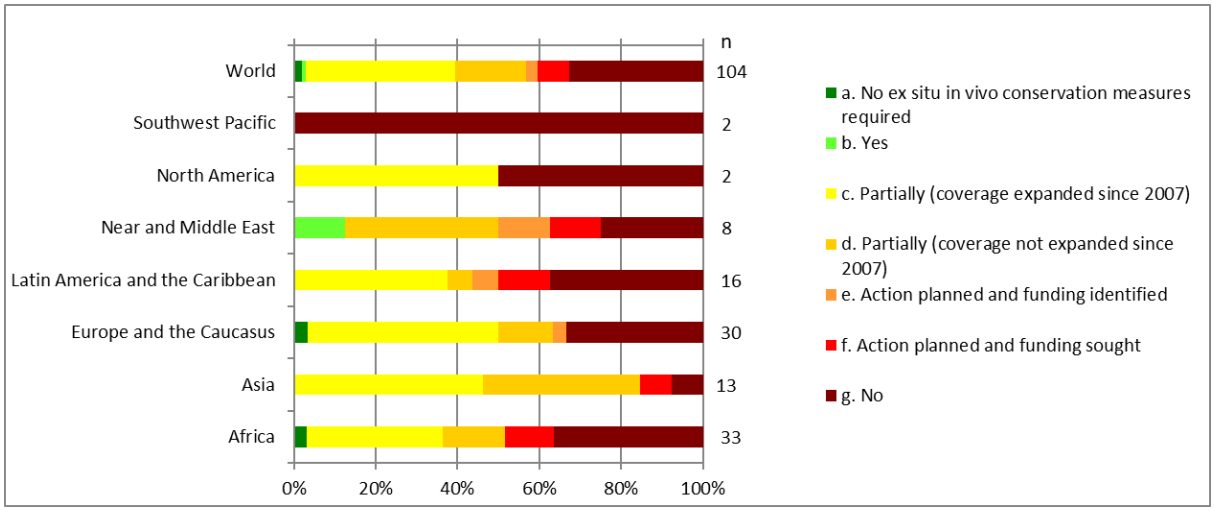
About 70 percent of reporting countries have at least some *in situ* conservation measures for animal genetic resources in place. Approximately 20 percent consider their measures to be comprehensive. The situation was quite similar in 2020. Both of the reporting countries in the Southwest Pacific and around 50 percent of those in the Near and Middle East, Latin America and the Caribbean, and Africa indicate that they have no measures of this type in place.

In situ conservation measures are most widespread in Europe and the Caucasus, and North America. Conservation measures mentioned by countries in various regions include financial incentives, such as the European Union's agri-environmental support measures, and breeding programmes.

SP 9: Establish or strengthen ex situ conservation programmes

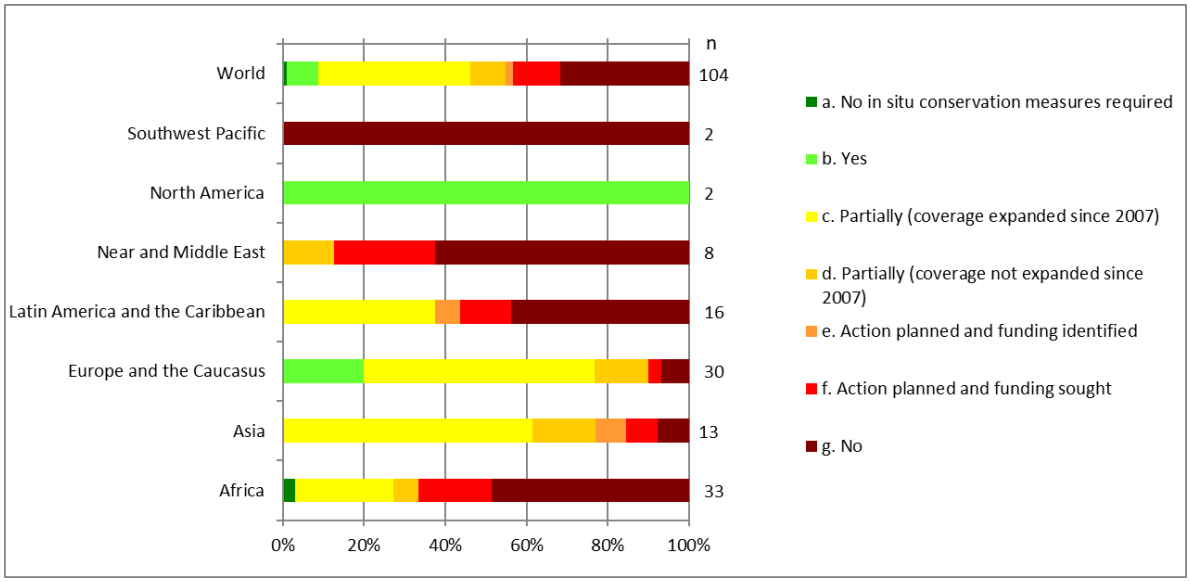
Indicator SP 9: The state of ex situ conservation programmes

Figure A2.31 Q35. Does your country have *ex situ in vivo* conservation measures in place for locally adapted breeds at risk of extinction and to prevent breeds from becoming at risk (SP 8 and SP 9)?



Ex situ in vivo measures for animal genetic resources are in place or partially in place in less than 60 percent of reporting countries. Various types of *ex situ in vivo* conservation are reported, including zoos, government and NGO farms, and national parks. India, for example, reports a growing number of breeding farms for ten species, operated by both governmental and non-governmental actors.

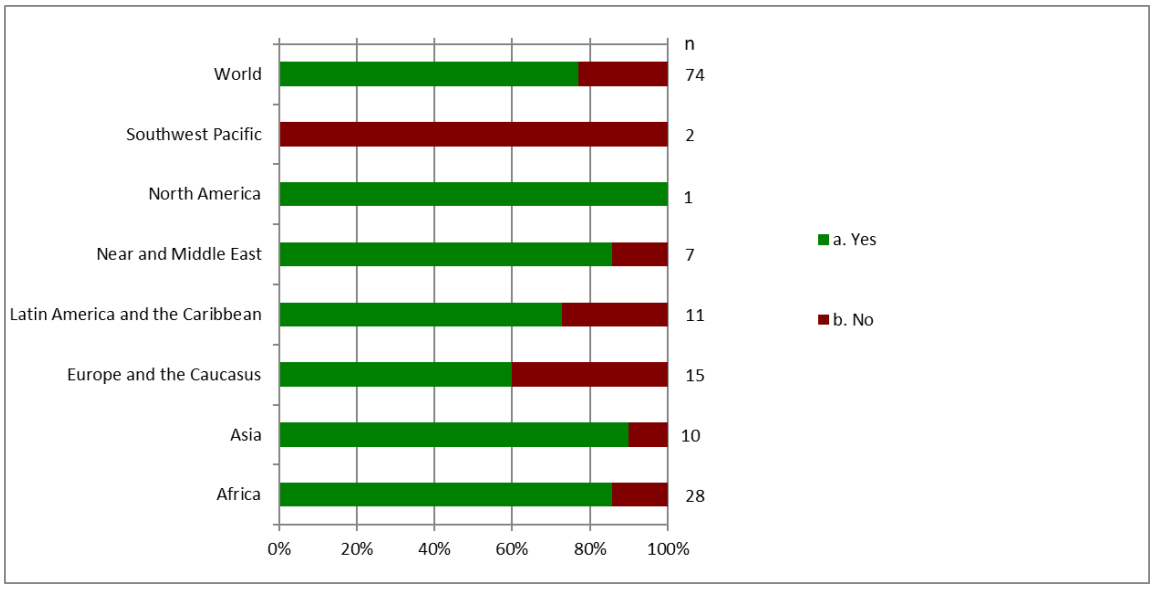
Figure A2.32 Q36. Does your country have *ex situ in vitro* conservation measures in place for locally adapted breeds at risk of extinction and to prevent breeds from becoming at risk (SP 8 and SP 9)?



Approximately 55 percent of reporting countries have *ex situ in vitro* conservation measures in place or partially in place for animal genetic resources (versus 60 percent in 2020). However, less than 10 percent consider that their measures are comprehensive. The extent of coverage varies greatly from region to region. No *ex situ in vitro* measures are reported from the Southwest Pacific, and very few from the Near and Middle East or Africa. Several countries report constraints linked to a lack of technical skills.

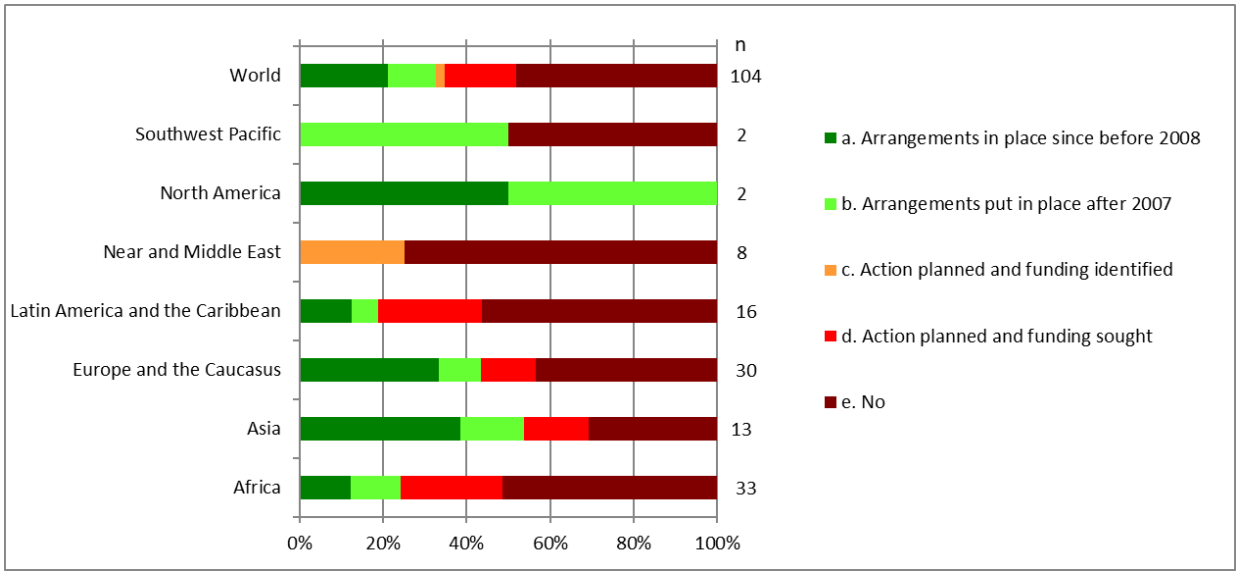
When asked whether measures were initiated before or after the adoption of the Global Plan of Action (Optional Question 37), countries report more frequently that these measures were established before the Global Plan of Action than after. Results were similar for gene-banking infrastructure (27 percent before versus 12 percent after), legal, policy, or strategic frameworks (18 percent before versus 11 percent after), and research activities (31 percent before versus 10 percent after).

Figure A2.33 Q38. If your country has not established any conservation programmes, is this a future priority?



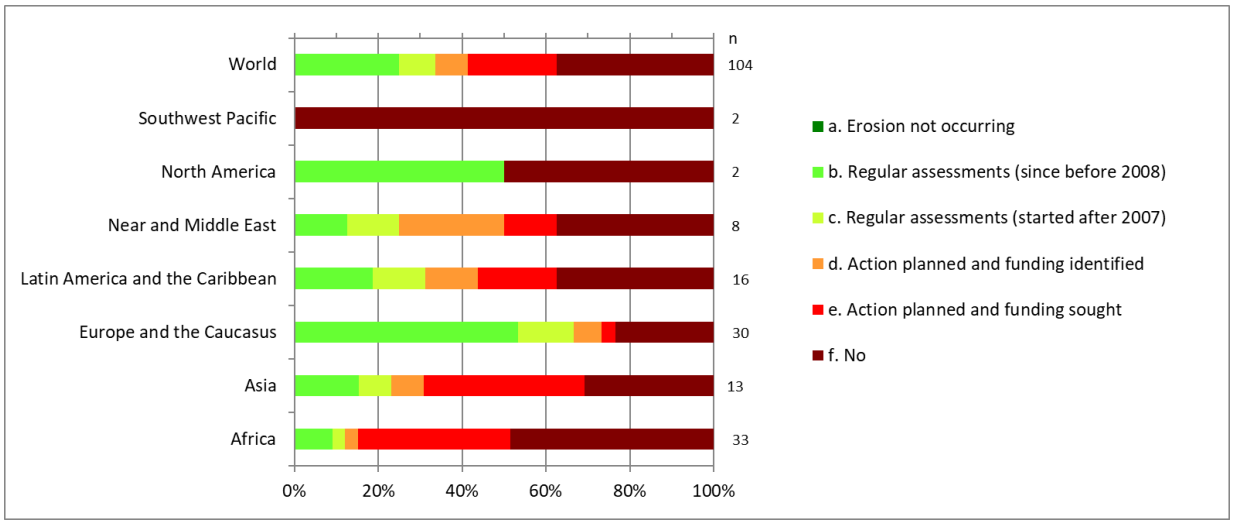
The above question was not considered in the calculation of the indicator because it was only addressed to the subset of countries responding negatively to the preceding questions. The overwhelming majority of countries that have not yet established conservation programmes report that this is a future priority.

Figure A2.34 Q42. Are arrangements in place in your country for extraction and use of conserved genetic material following loss of animal genetic resources (e.g. through disasters), including arrangements to enable restocking (SP 9, Action 3)?



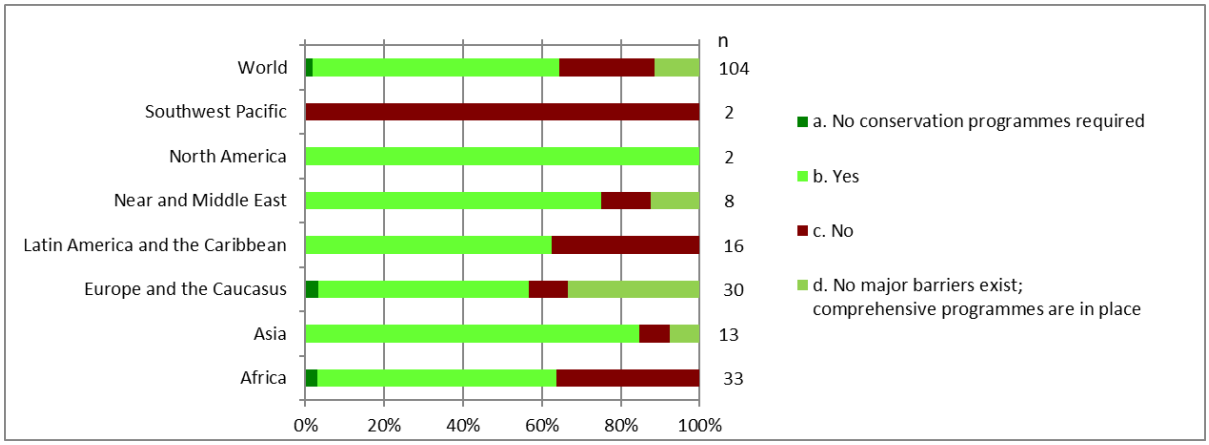
More than 30 percent of reporting countries have arrangements in place for extraction and use of conserved genetic material. No such arrangements are reported by countries from the Near and Middle East, and few by countries from Latin America and the Caribbean or Africa.

Figure A2.35 Q30. Does your country regularly assess factors leading to the erosion of its animal genetic resources (SP 7, Action 2)?



Around 35 percent of reporting countries regularly assess factors leading to the erosion of their animal genetic resources for food and agriculture. No such assessments are reported from the Southwest Pacific and few from Africa. Several countries report the existence of isolated studies aimed at assessing these factors, such as the genomic analysis of exotic introgression in certain local South African sheep breeds.[51]

Figure A2.36 Q39. Has your country identified the major barriers and obstacles to enhancing the conservation of its animal genetic resources?



The majority of countries report that they have identified the major barriers and obstacles to enhancing the conservation of their animal genetic resources. This result has remained essentially unchanged relative to 2020. The two reporting countries from the Southwest Pacific indicate that they have not identified barriers and obstacles.

[51] Selepe M.M. *et al.* 2018. Genetic structure of South African Nguni (Zulu) sheep populations reveals admixture with exotic breeds. *PLoS One*, 13(4):e0196276. https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0196276

Figure A2.37 Q40_1. If your country has existing *ex situ* collections of animal genetic resources, are there major gaps in these collections (SP 9, Action 5)?

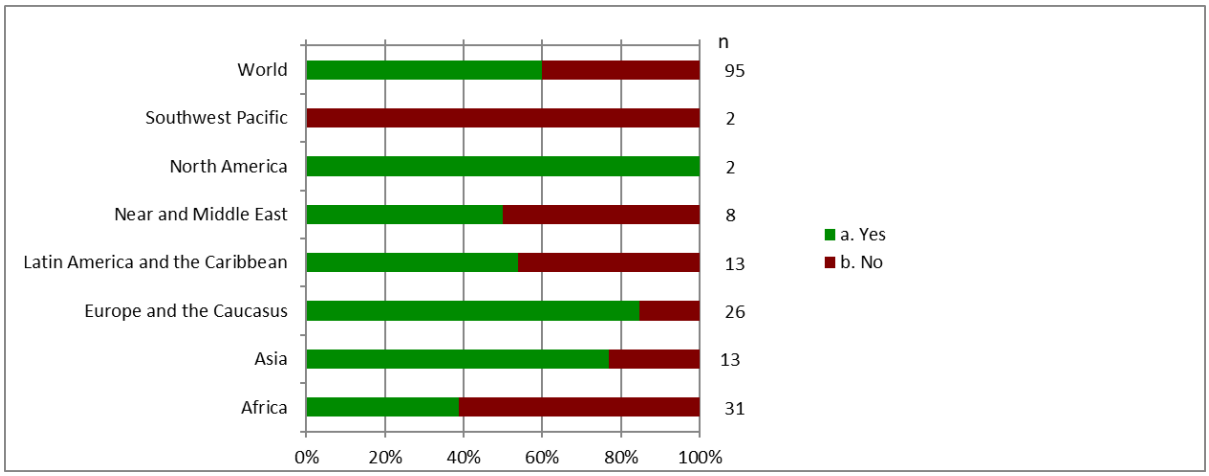
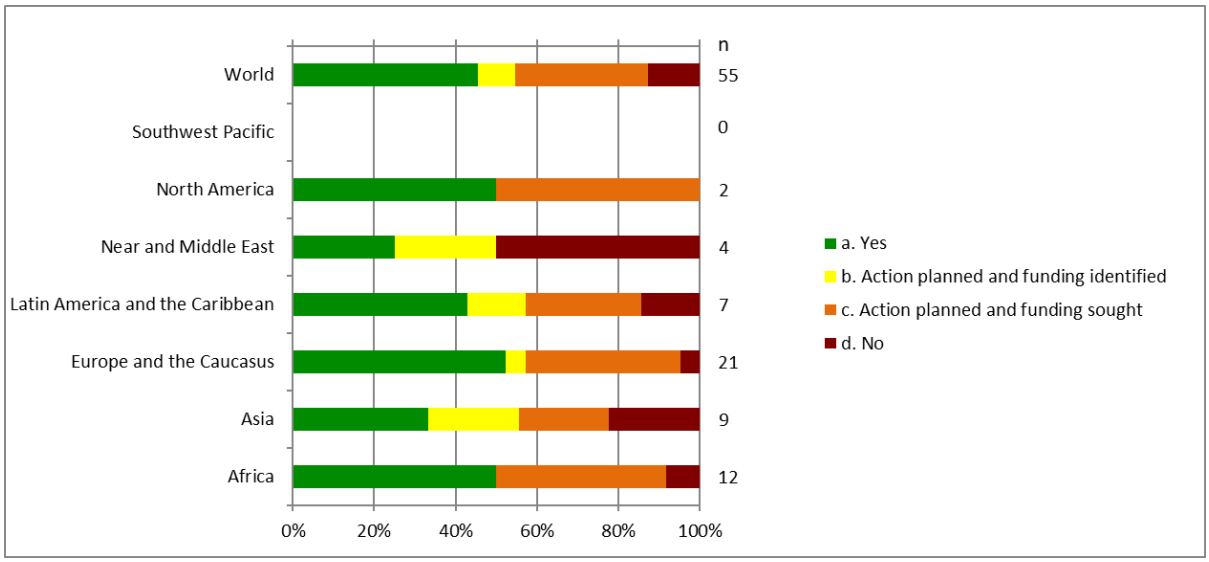
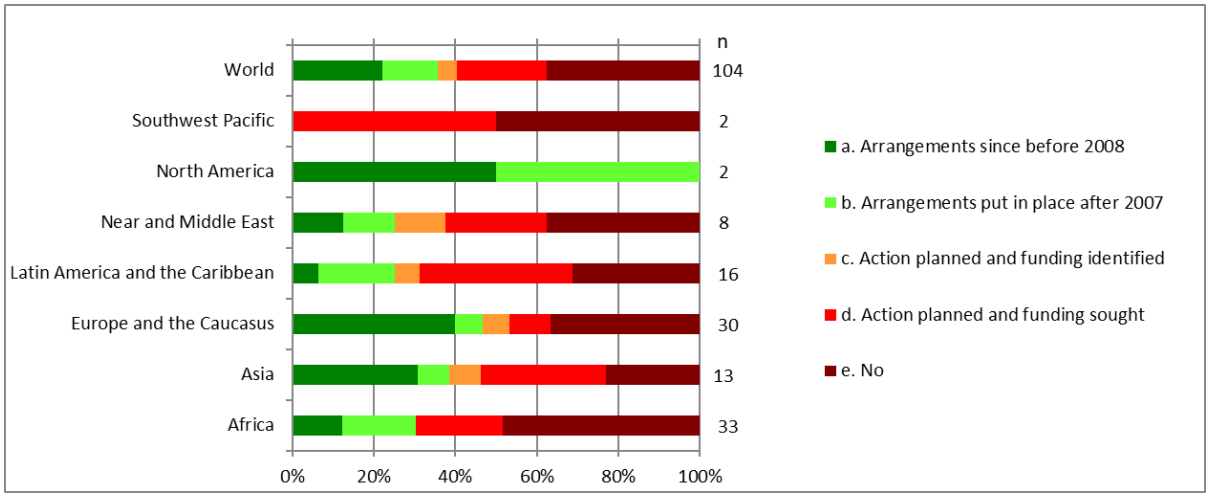


Figure A2.38 Q40_2. If yes, have priorities for filling the gaps been established?



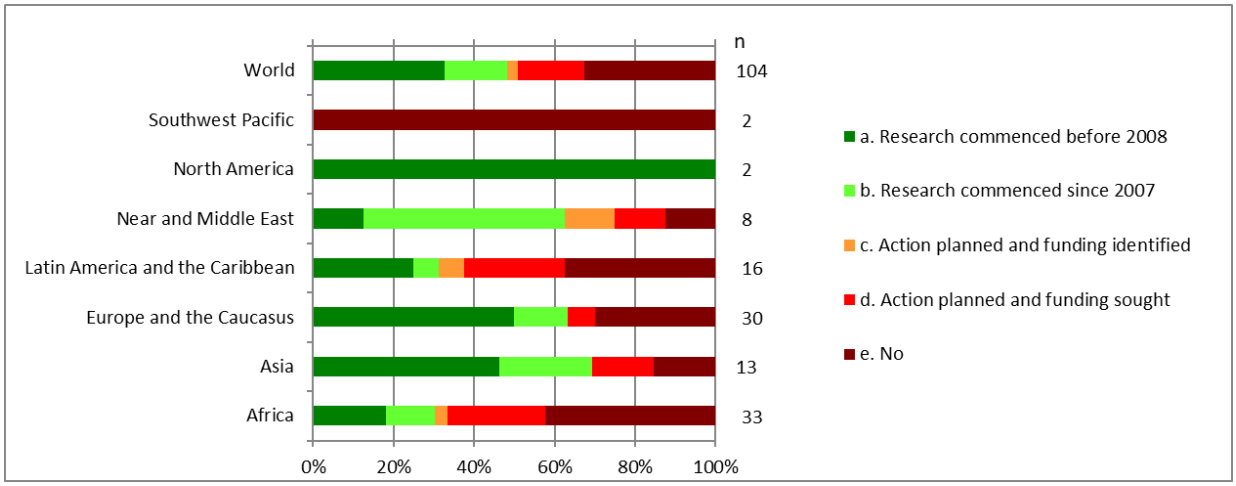
Question 40 was a two-part question that was not considered in the calculation of the indicator because it was only addressed to the subset of countries responding positively to prior questions. Among countries with an *ex situ* conservation programme, around 50 percent of the countries that report gaps in their collections of animal genetic resources indicate that priorities for filling the gaps have been established. The most commonly reported gaps relate to a lack of materials for locally adapted or native breeds (cited by 38 percent of countries), endangered breeds (36 percent) or particular species (30 percent).

Figure A2.39 Q41. Are arrangements in place in your country to protect breeds and populations that are at risk from natural or human-induced disasters (SPA 3)?



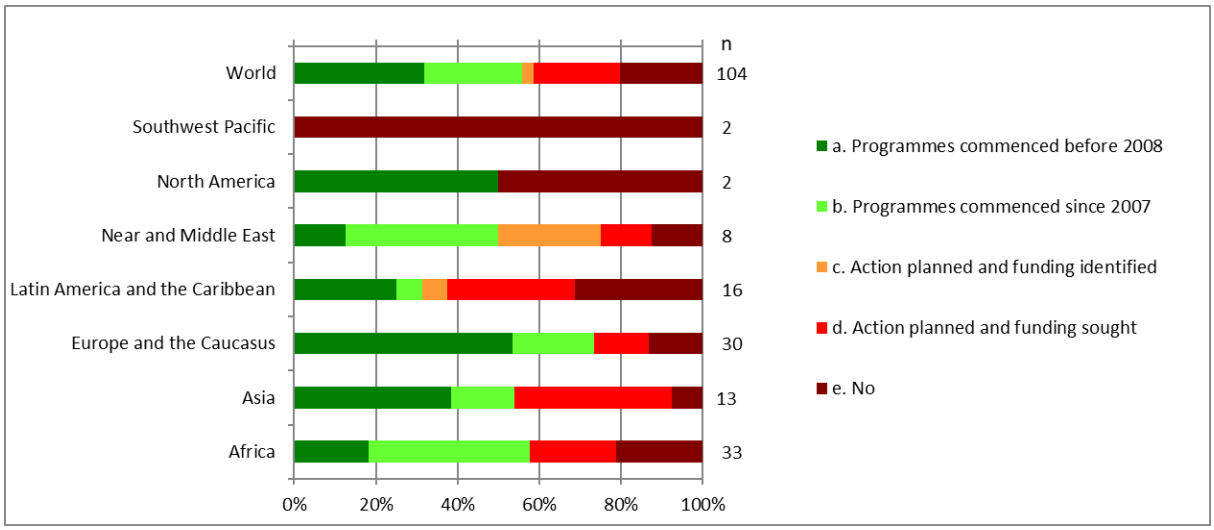
Approximately 35 percent of reporting countries have arrangements in place to protect their breeds and populations from natural or human-induced disasters. The most comprehensive coverage is reported from North America. The arrangements mentioned include repopulation measures in Ethiopia and financial aid and/or tax exemptions for affected farmers in Argentina and the Islamic Republic of Iran.

Figure A2.40 Q43. Is your country conducting research to adapt existing, or develop new, methods and technologies for *in situ* and *ex situ* conservation of animal genetic resources (SP 11, Action 1)?



Almost 50 percent of reporting countries indicate that they are undertaking research on conservation methods for animal genetic resources. However, regional variation is substantial. No country from the Southwest Pacific, and only 30 percent from Africa and Latin America and the Caribbean report having undertaken research on conservation methods. Among the examples given by countries, Japan reports various research projects on the use of germ cells for conservation purposes in chickens, quails and pigs.

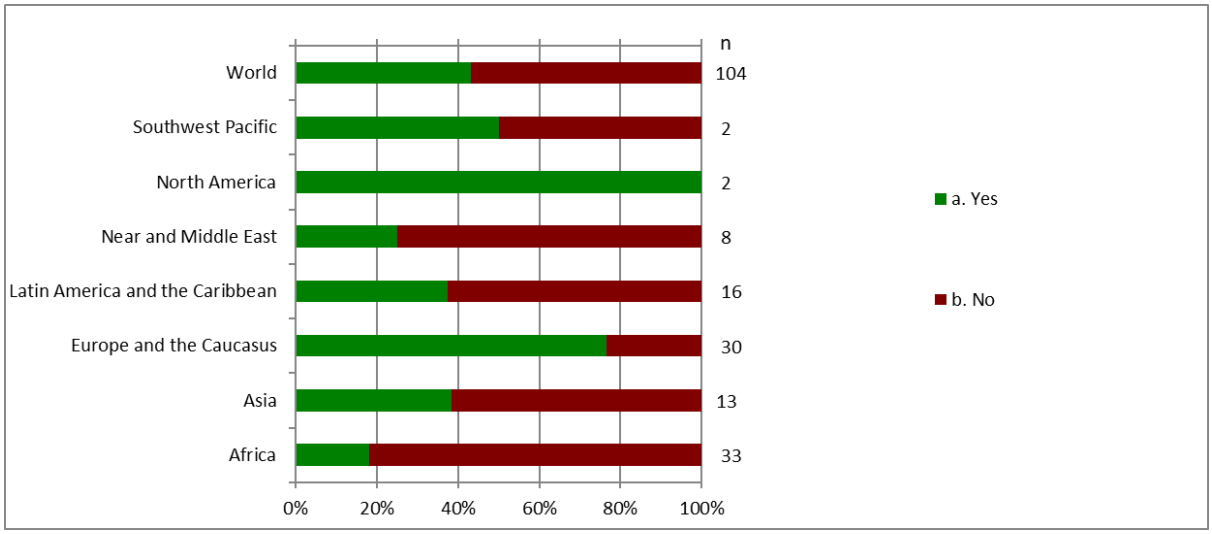
Figure A2.41 Q44. Does your country implement programmes to promote documentation and dissemination of knowledge, technologies and best practices for conservation (SP 11, Action 2)?



Approximately 55 percent of reporting countries indicate that they implement programmes to promote documentation and dissemination of knowledge, technologies and best practices for conservation. Such programmes are relatively uncommon in the Southwest Pacific, and Latin America and the Caribbean. Around 25 percent of countries commenced programmes of this type after 2007.

When asked to select up to three priority requirements for enhancing conservation measures for animal genetic resources (Optional Question 45), 50 percent of countries identified "Establishing a gene bank and/or other infrastructure", 46 percent chose "Fundraising", 38 percent chose "Strengthening human capacity", 30 percent chose "Implementation of breeding and *in situ* conservation programmes" and 30 percent chose "Undertaking or improve the characterization of local animal genetic resources". The remaining factors were selected by less than 30 percent of countries.

Figure A2.42 Q59. Are there any national NGOs active in your country in the fields of: Conservation of breeds at risk?



More than 40 percent of reporting countries indicate that they have national NGOs active in the field of conservation. Such NGOs are widespread in North America and Europe and the Caucasus but are rare elsewhere. Only a few countries from Africa and the Near and Middle East report any national NGOs involved in conservation.

When asked to select up to three factors contributing to the erosion of animal genetic resources (Optional Question 31), 63 percent of countries identified "(Indiscriminate) cross-breeding", 57 percent selected "Introduction/increased use of exotic breeds", 37 percent chose "Breeds not

profitable/competitive or having poor performance" and 31 percent chose "Intensification of production or decline of traditional production systems or small farms". The remaining factors were selected by less than 25 percent of countries.

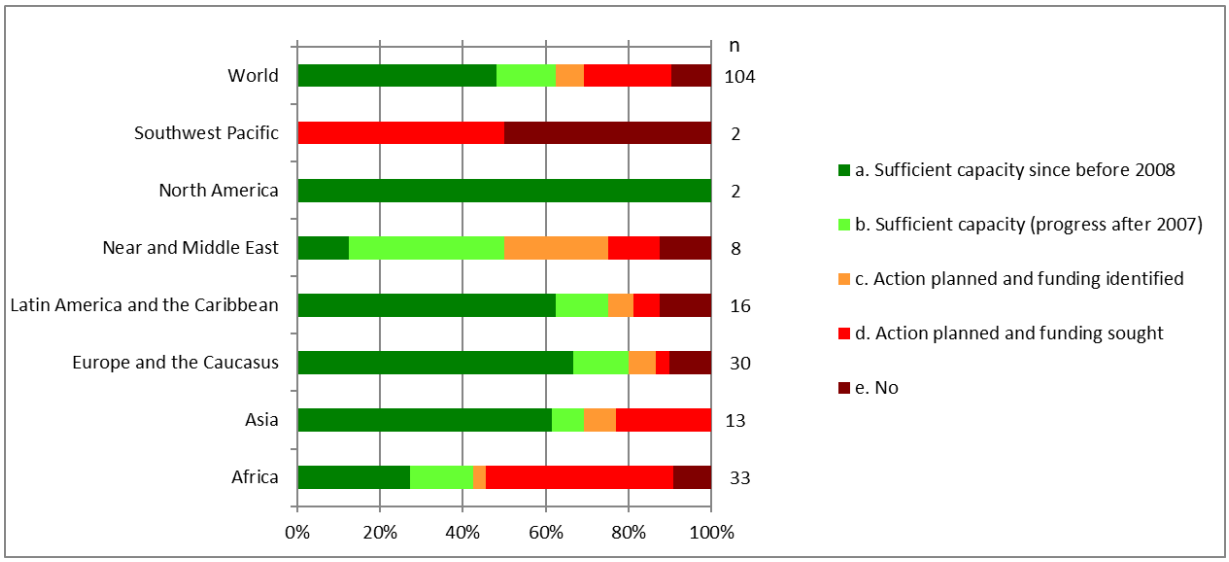
Strategic Priority Area 4: Policies, institutions and capacity-building

Long-term goal: Established cross-cutting policies and legal frameworks, and strong institutional and human capacities to achieve successful medium- and long-term planning for livestock sector development, and the implementation of national programmes for the long-term.

SP 12: Establish or strengthen national institutions, including national focal points, for planning and implementing animal genetic resources measures, for livestock sector development

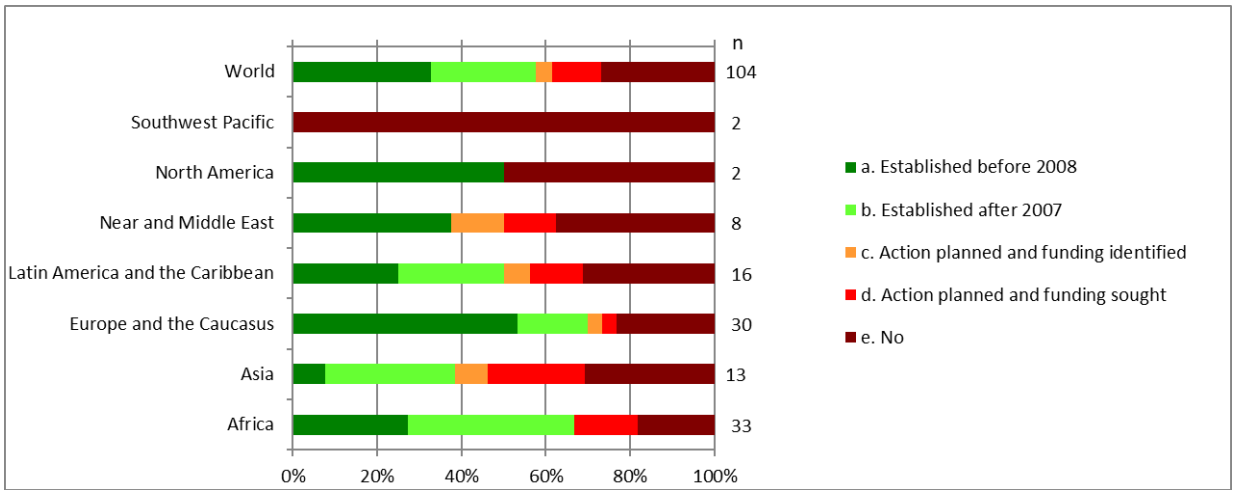
Indicator SP 12: The state of efforts to strengthen national institutions for planning and implementing animal genetic resources measures

Figure A2.43 Q47. Does your country have sufficient institutional capacity to support holistic planning of the livestock sector (SP 12, Action 1)?



Approximately 65 percent of reporting countries indicate that their national institutional capacity to support holistic planning of the livestock sector is sufficient. The regions with the lowest proportions of countries reporting that their capacity is sufficient were the Southwest Pacific, the Near and Middle East, and Africa, in increasing order.

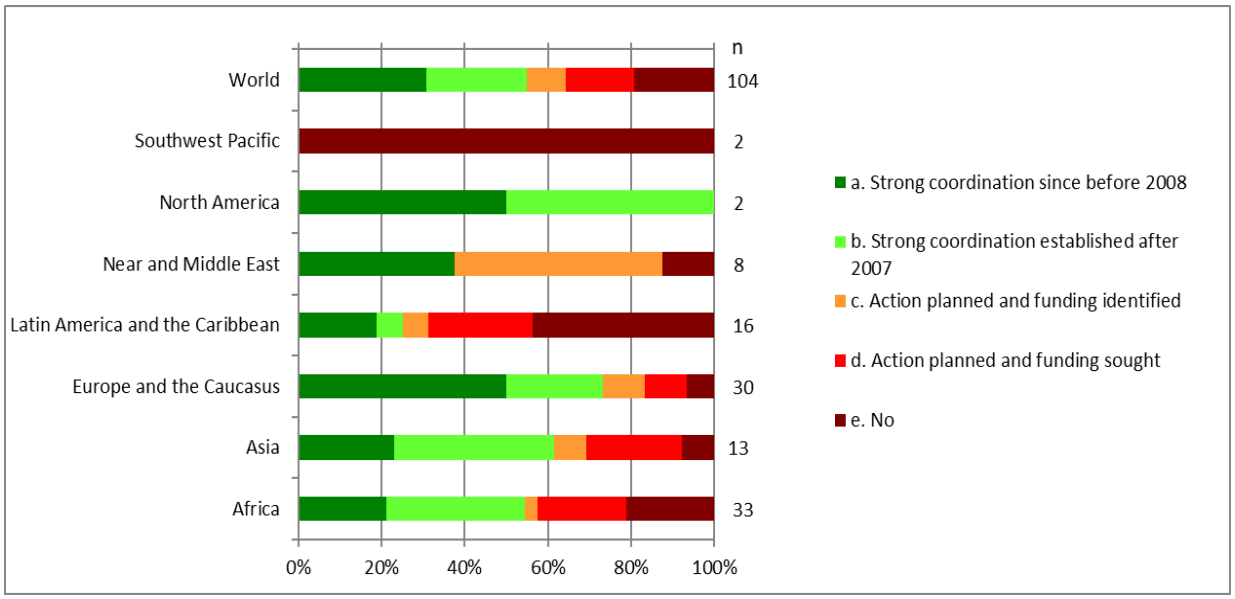
Figure A2.44 Q53. Has your country established a National Advisory Committee for Animal Genetic Resources (SP 12, Action 3)?



Approximately 60 percent of reporting countries have established a national advisory committee for animal genetic resources, which is nearly the same as in 2014 and 2020. Such committees do not exist in the two reporting countries from the Southwest Pacific and are relatively rare in Asia and in the Near and Middle East. Approximately 25 percent of countries report that their committees were established after 2007.

Generally, these committees serve an advisory and consultative role with regard to various animal genetic resources management issues at the national level. However, some countries (e.g. Botswana, Costa Rica, Eswatini and Mauritius) report that although such committees were established at some point in the past, they are no longer active and need to be reestablished. Argentina reports that an advisory committee was formed for the preparation of past reports on the state of the world's animal genetic resources but that it has not engaged in regular activities outside these reporting periods.

Figure A2.45 Q54. Is there strong coordination and interaction between the National Focal Point and stakeholders involved with animal genetic resources, such as the breeding industry, livestock keepers, government agencies, research institutes and civil society organizations (SP 12, Action 3)?



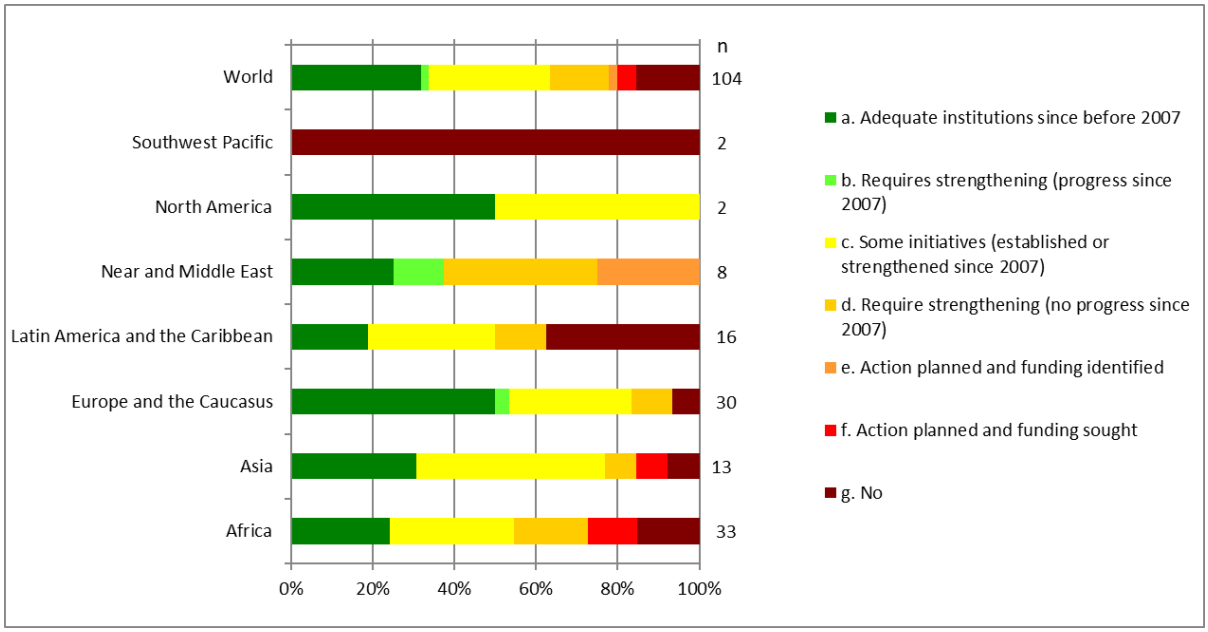
Approximately 55 percent of reporting countries indicate that strong coordination exists between their National Focal Points for Animal Genetic Resources and other stakeholders in the sector. The weakest regions in this respect are the Southwest Pacific, Latin America and the Caribbean, and the Near and

Middle East. Nearly 25 percent of countries report that strong coordination exists because of progress made after 2007.

SP 13: Establish or strengthen national educational and research facilities

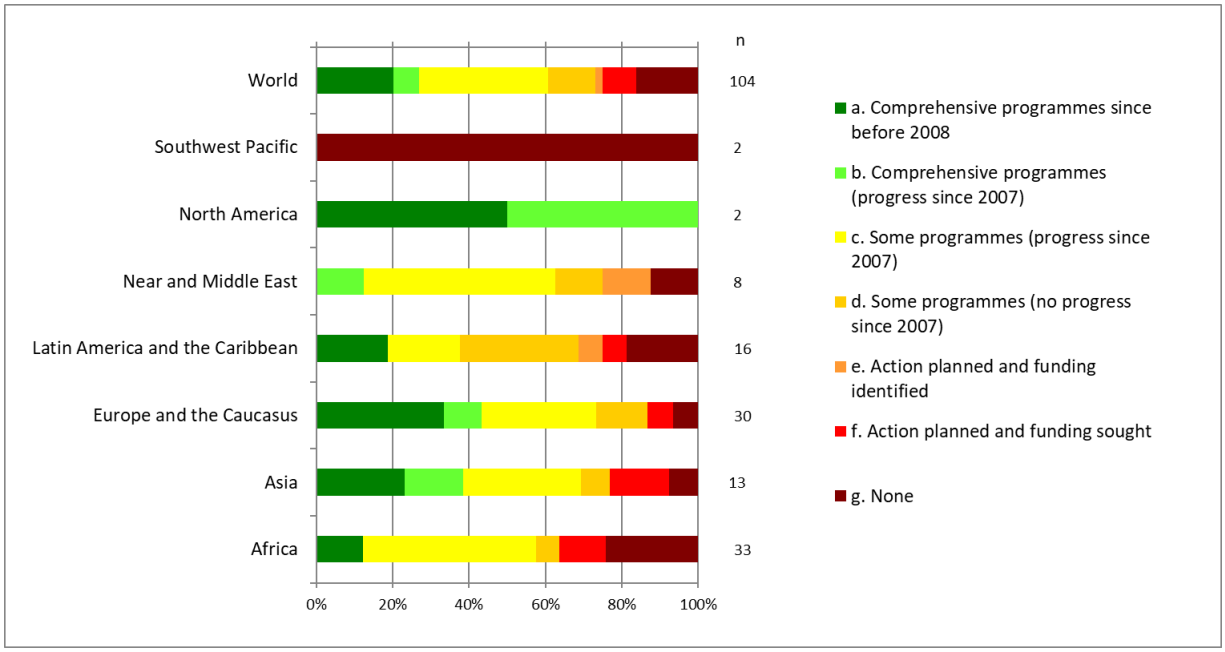
Indicator SP 13: The state of efforts to strengthen national educational and research facilities

Figure A2.46 Q60. Has your country established or strengthened research or educational institutions in the field of animal genetic resources management (SP 13, Action 3)?



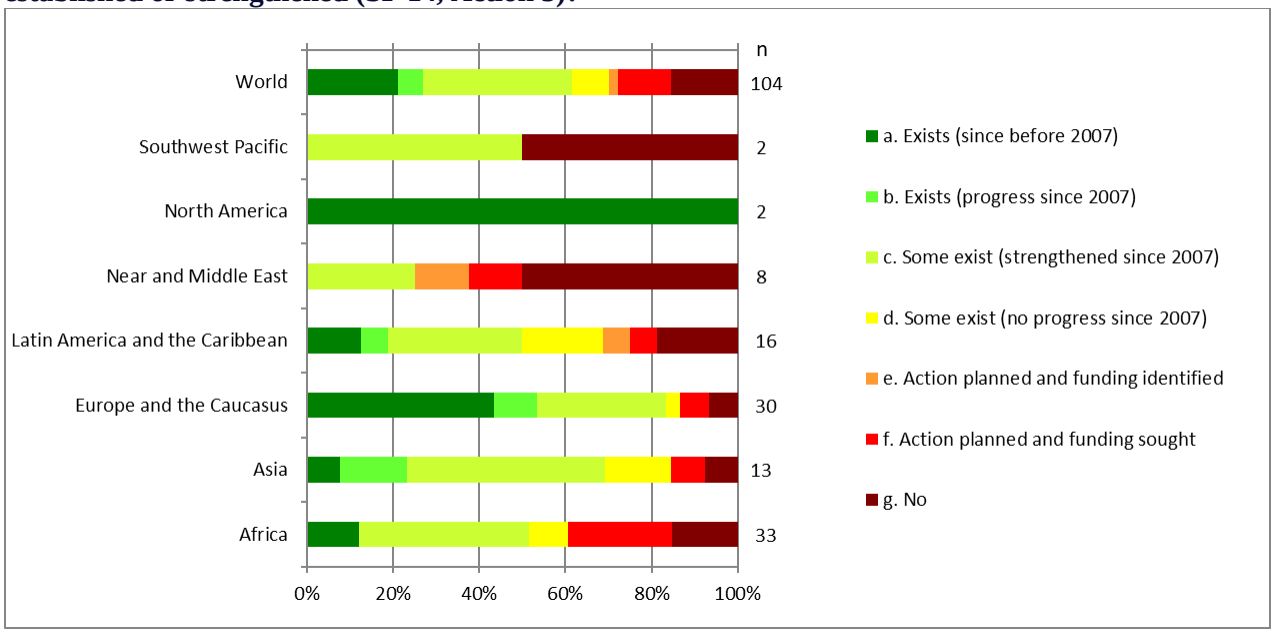
About 30 percent of reporting countries indicate that they consider their existing research and education programmes in the field of animal genetic resources management to be adequate. A further 45 percent, approximately, report that they have some institutions in place but that these require strengthening. With 50 percent of countries reporting adequate research and education programmes, the situation is generally reported to be better in North America and in Europe and the Caucasus. Countries from both developed and developing regions report that they offer educational courses and programmes at various levels. Italy notes that the issue is not a lack of institutions but rather a shortage of students interested in pursuing courses in this field.

Figure A2.47 Q57. Which of the following options best describes the state of training and technology transfer programmes in your country related to inventory, characterization, monitoring, sustainable use, development and conservation of animal genetic resources (SP 14, Action 1)?



Approximately 25 percent of countries indicate the presence of comprehensive training and technology transfer programmes related to inventory, characterization, monitoring, sustainable use, development and conservation of animal genetic resources. A majority of countries in all regions except the Southwest Pacific report that they have some measures in place in this field. More than 40 percent of countries indicate that they have made progress since 2007.

Figure A2.48 Q58. Have organizations (including where relevant community-based organizations), networks and initiatives for sustainable use, breeding and conservation been established or strengthened (SP 14, Action 3)?



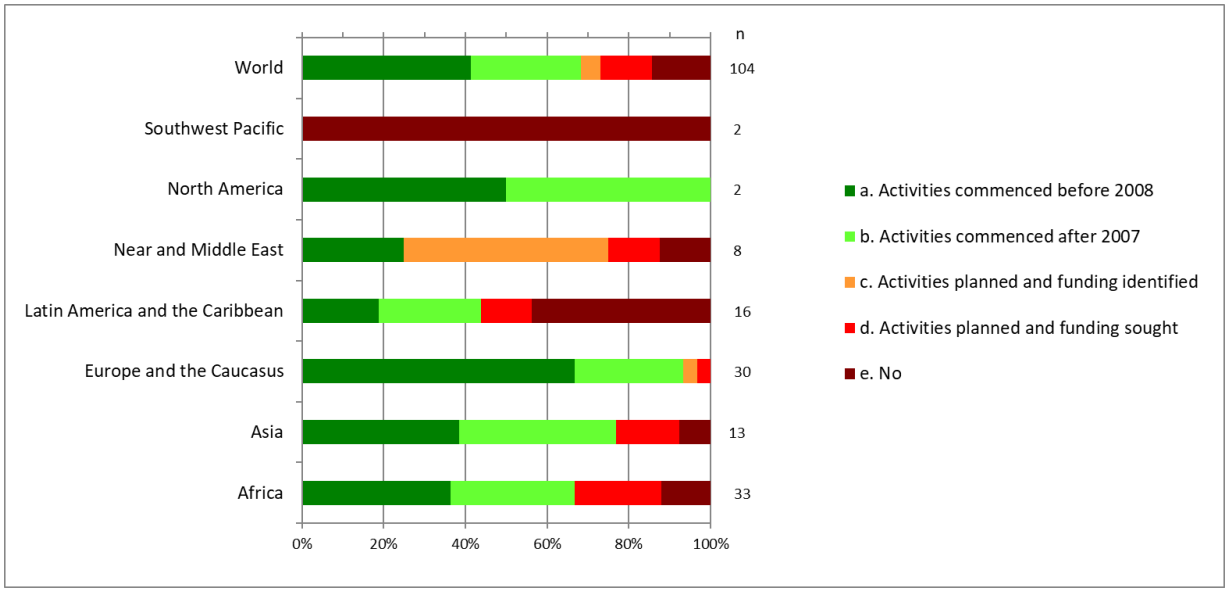
Organizations (including, where relevant, community-based organizations), networks and initiatives for sustainable use, breeding and conservation exist in almost 75 percent of reporting countries. Organizations, networks and initiatives of this type are less frequently reported by countries from the

Near and Middle East and the Southwest Pacific than by those from other parts of the world. For example, Mali reports the establishment in 2022 of local associations for the management of N'dama and Peul Zebu cattle breeds.

SP 18: Raise national awareness of the roles and values of animal genetic resources

Indicator SP 18: The state of efforts to raise national awareness of the roles and values of animal genetic resources

Figure A2.49 Q55. Does the National Focal Point (or other institutions) undertake activities to increase public awareness of the roles and values of animal genetic resources (SP 18)?



Almost 70 percent of reporting countries indicate that their National Focal Points undertake activities to increase public awareness of the roles and values of animal genetic resources. Most of the countries undertaking awareness-raising activities were already doing so prior to 2007.

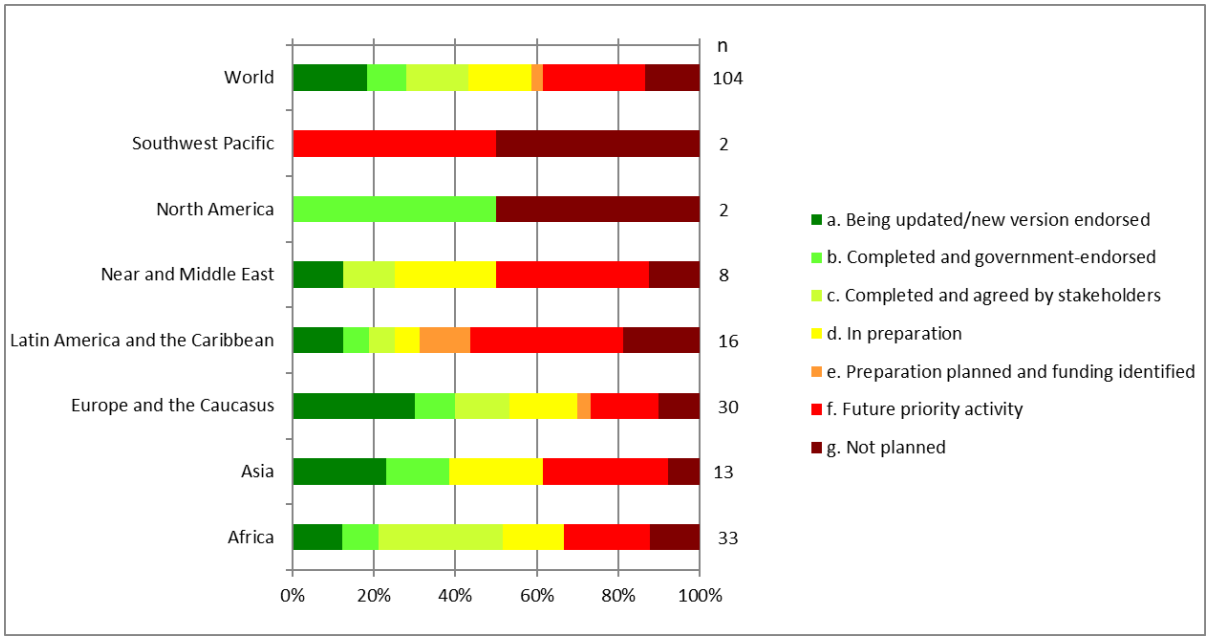
Examples of reported awareness-raising activities include (i) preparing hard-copy publications, (ii) creating websites, (iii) organizing events such as seminars or field days, and (iv) participating in interviews. Canada provided an example of interviews undertaken.[52]

[52] Radio-Canada. 2024. Biodiversité des animaux d'élevage [video]. [Cited 10 September]. https://ici.radio-canada.ca/tele/la-semaine-verte/site/segments/reportage/495436/biodiversite-animaux-elevage
https://mydigitalpublication.com/publication/?m=1191&i=344839&p=20&ver=html5

SP 20: Review and develop national policies and legal frameworks for animal genetic resources

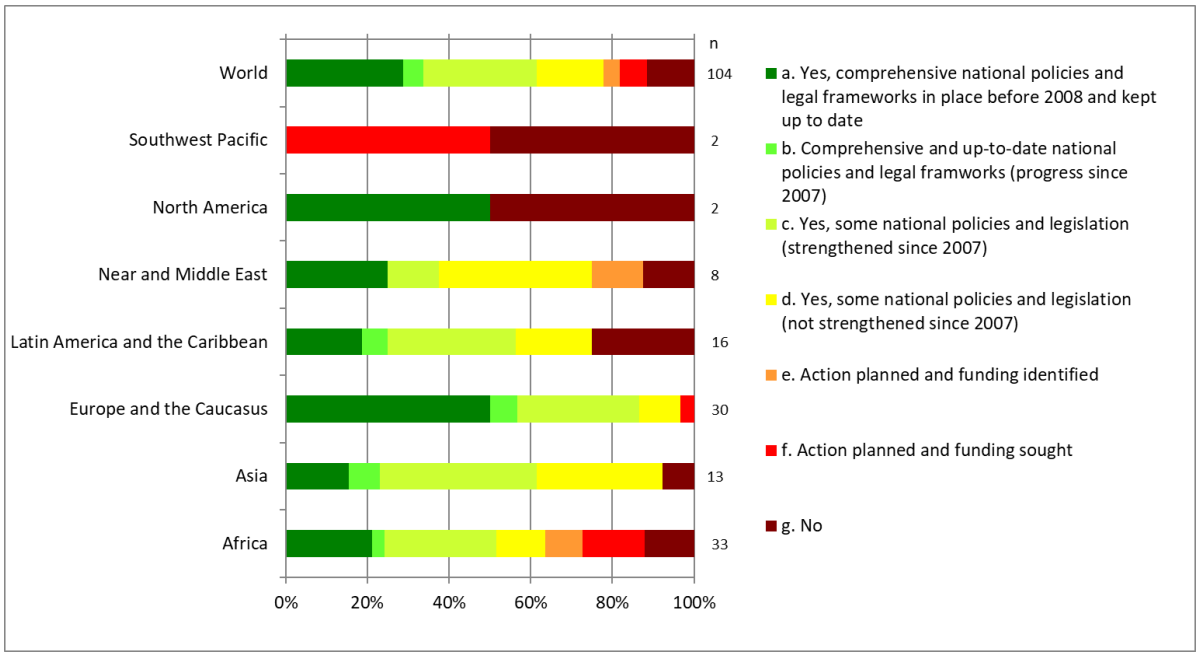
Indicator SP 20: The state of national policies and legal frameworks for animal genetic resources

Figure A2.50 Q48. What is the current status of your country's national strategy and action plan for animal genetic resources (SP 20)?



More than 40 percent of countries indicate that they have completed the preparation of a national strategy and action plan for animal genetic resources. Some strategies and action plans have been endorsed by the respective government. Others have been agreed by stakeholders but not yet endorsed by the government. Around 20 percent of countries have already updated or are in the process of updating previously developed instruments. Another 20 percent of countries, approximately, are in the process of preparing their strategies and plans. Progress in terms of the proportion of countries that have started to prepare a national strategy and action plan has been slowest in the Southwest Pacific, Latin America and the Caribbean, and the Near and Middle East. More than 10 percent of all reporting countries indicate that they have no plans to develop a national strategy and action plan.

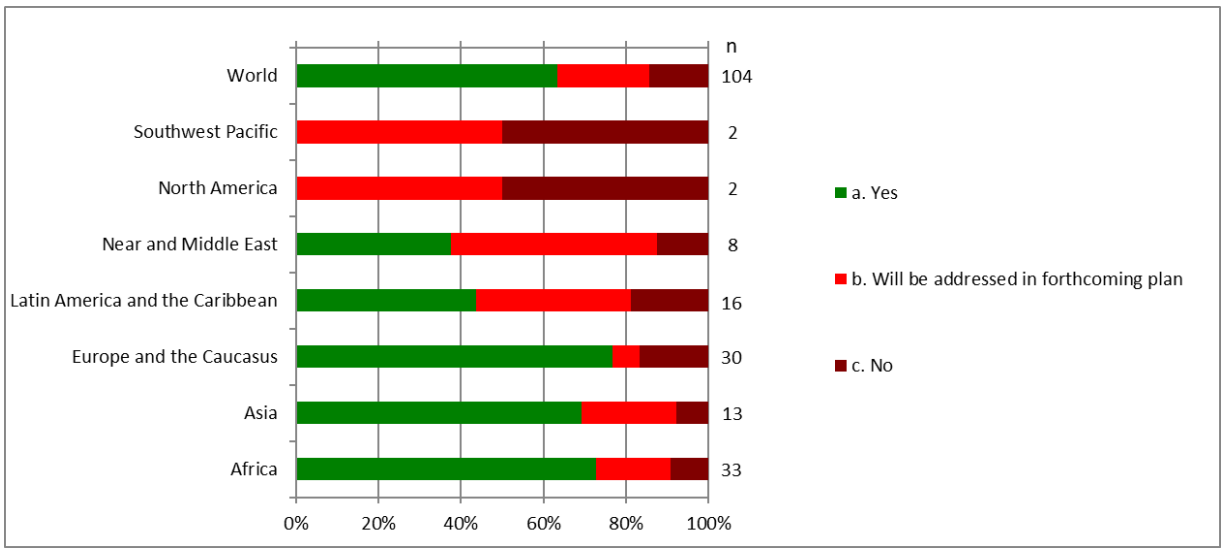
Figure A2.51 Q56. Does your country have national policies and legal frameworks for animal genetic resources management (SP 20)?



More than 30 percent of reporting countries indicate that their national policies and legal frameworks for animal genetic resources are comprehensive and up to date. Most of these frameworks were in this state prior to 2008. Europe and the Caucasus and North America are the only regions in which the majority of reporting countries regarded their polices and legal frameworks as being comprehensive and up to date. No countries in the Southwest Pacific report their frameworks to be comprehensive and up to date. Among countries that have planned action in this field, only a few have managed to identify funding to support follow-through.

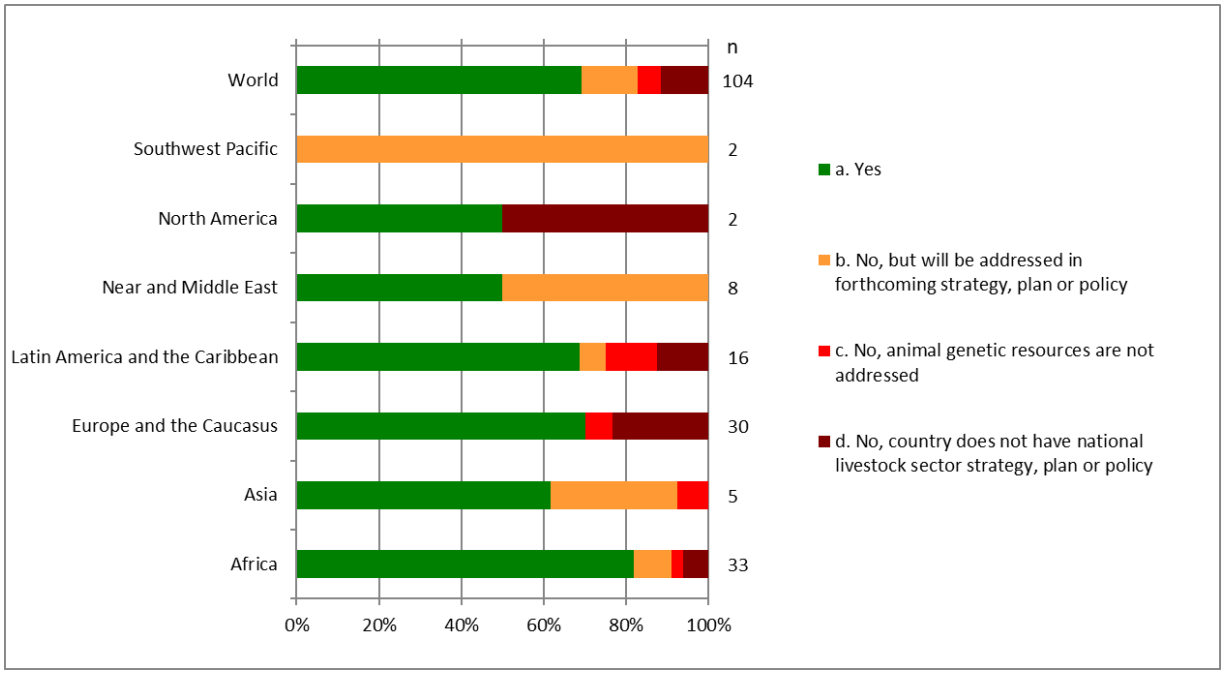
Additional questions contributing to Indicator SPA 4

Figure A2.52 Q49. Are animal genetic resources addressed in your country's National Biodiversity Strategy and Action Plan (https://www.cbd.int/nbsap)



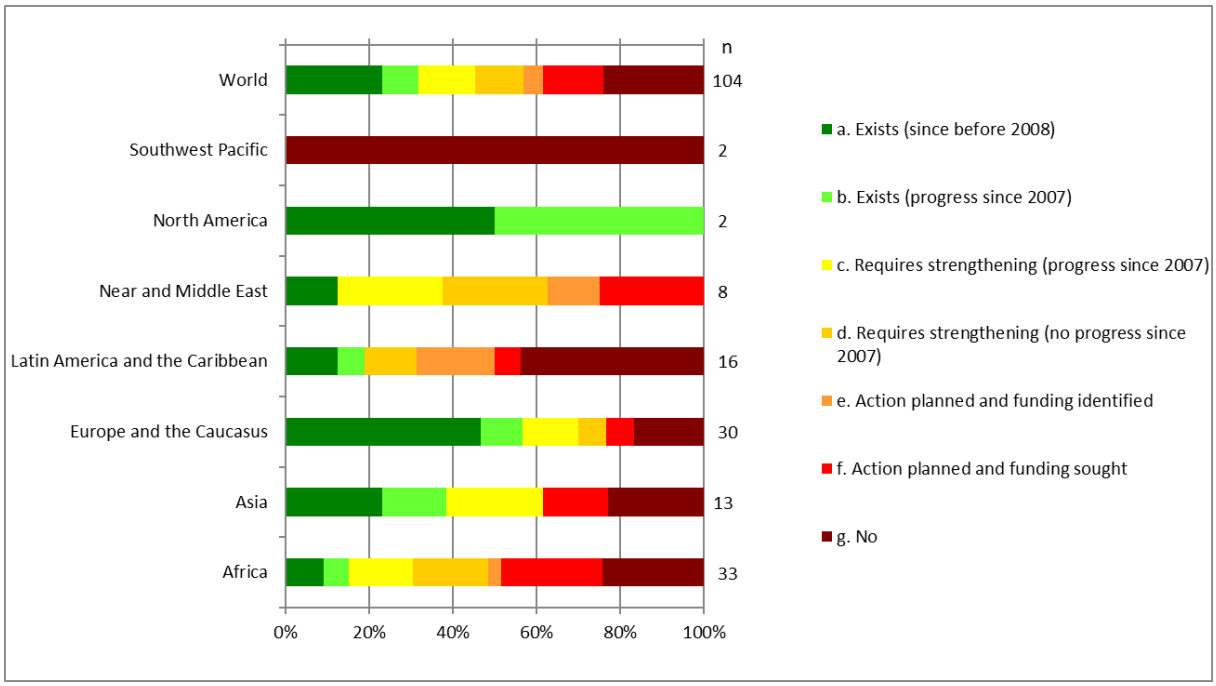
Approximately 65 percent of reporting countries indicate that animal genetic resources are addressed in their National Biodiversity Strategy and Action Plans. An additional 20 percent of countries report that animal genetic resources will be addressed in their forthcoming plan. Several countries report having updated their plans. For example, Bhutan's National Biodiversity Strategic Action Plan version 5, which addresses animal genetic resources, was due to be published by the end of August 2024.

Figure A2.53 Q50. Are animal genetic resources addressed in your country's national livestock sector strategy, plan or policy (or equivalent instrument)?



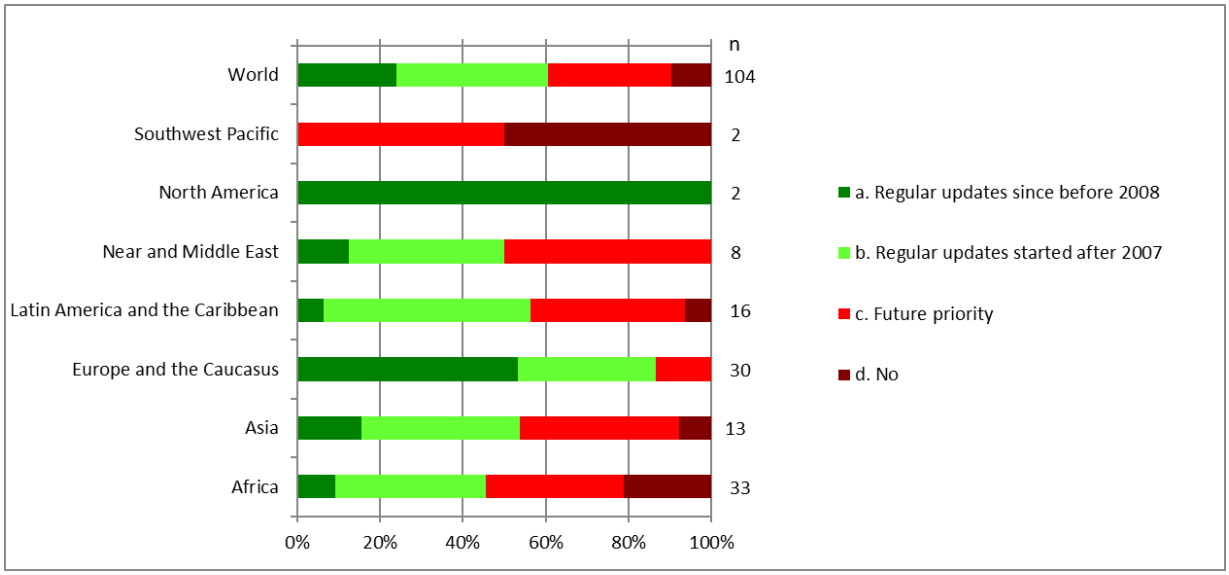
In almost 70 percent of reporting countries, animal genetic resources are addressed in the national livestock-sector strategy, plan or policy. In Africa, more than 80 percent of countries address animal genetic resources in their general livestock policy instruments. Both reporting countries from the Southwest Pacific and 50 percent of those from the Near and Middle East indicate that they have no coverage of animal genetic resources in their respective instruments.

Figure A2.54 Q51. Has your country established or strengthened a national database for animal genetic resources (independent from DAD-IS) (SP 15, Action 4)?



Slightly less than 60 percent of countries report that they have established a national database for animal genetic resources for food and agriculture, although the database requires strengthening in about half of these cases. Developments in this field have been limited in several regions, however, particularly in the Southwest Pacific, Africa, and Latin America and the Caribbean. Brazil, Canada and the United States of America have partnered together to develop Animal GRIN, a comprehensive database for documenting and managing animal genetic resources, biological materials and related information.

Figure A2.55 Q52. Have your country's national data on animal genetic resources been regularly updated in DAD-IS?



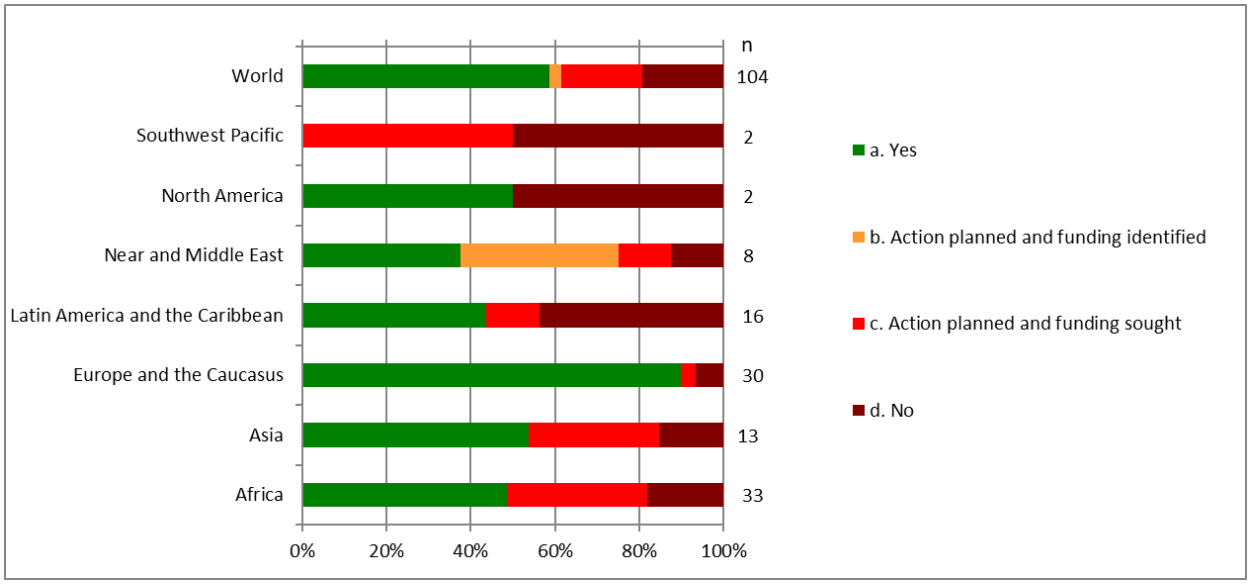
About 60 percent of reporting countries indicated that their national data on animal genetic resources have been regularly updated in DAD-IS (versus 50 percent in 2020). The majority of these countries started their regular updates after 2007. Outside Europe and the Caucasus and North America, no country from the Southwest Pacific and only 50 percent of countries from other regions report that their data are updated regularly. A frequent explanation across all regions for the lack activity is limited staff and insufficient funding.

Implementation and financing of the Global Plan of Action: collaboration

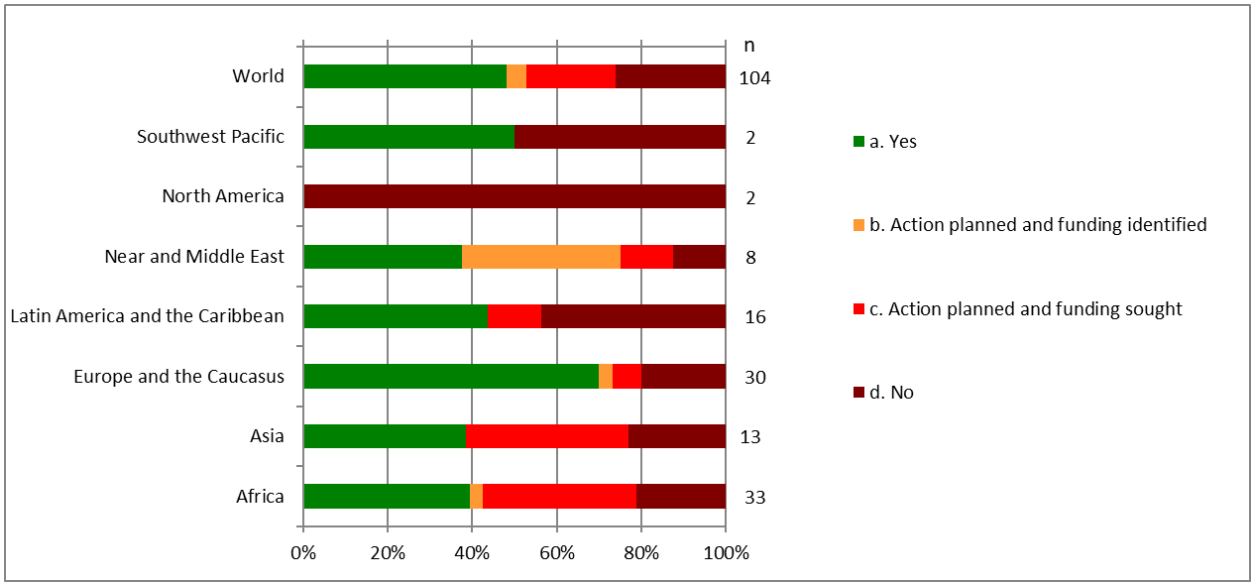
Indicator: The state of international collaboration for planning and implementing animal genetic resources measures

Figure A2.56 Q62. Has your country established or strengthened international collaboration in (SP 16):

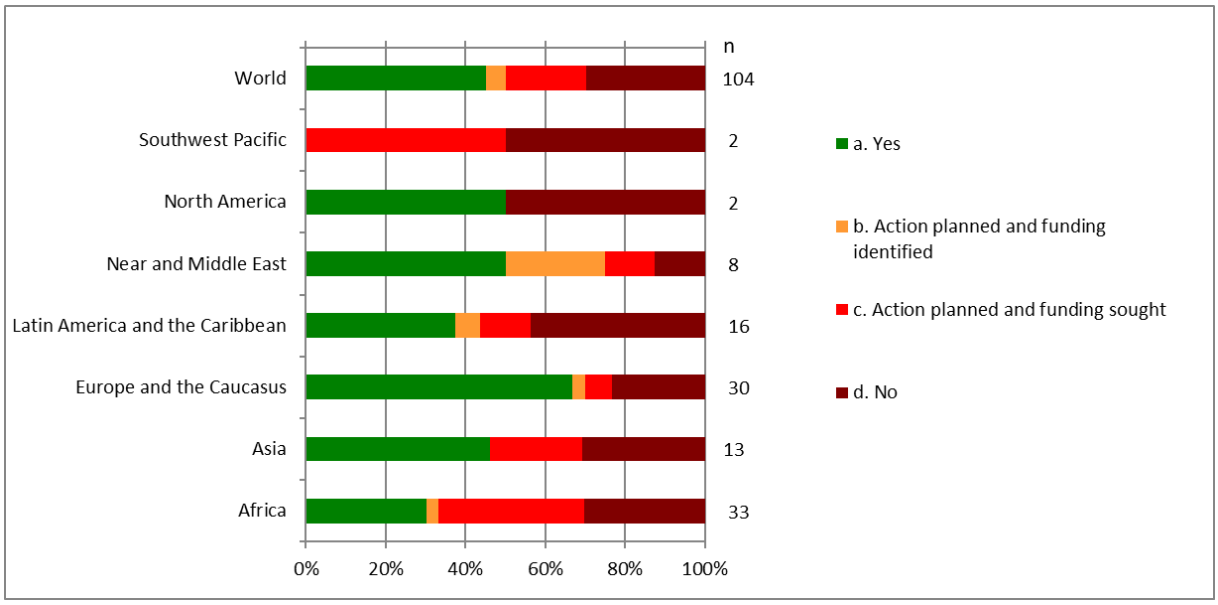
Characterization?



Sustainable use and development?

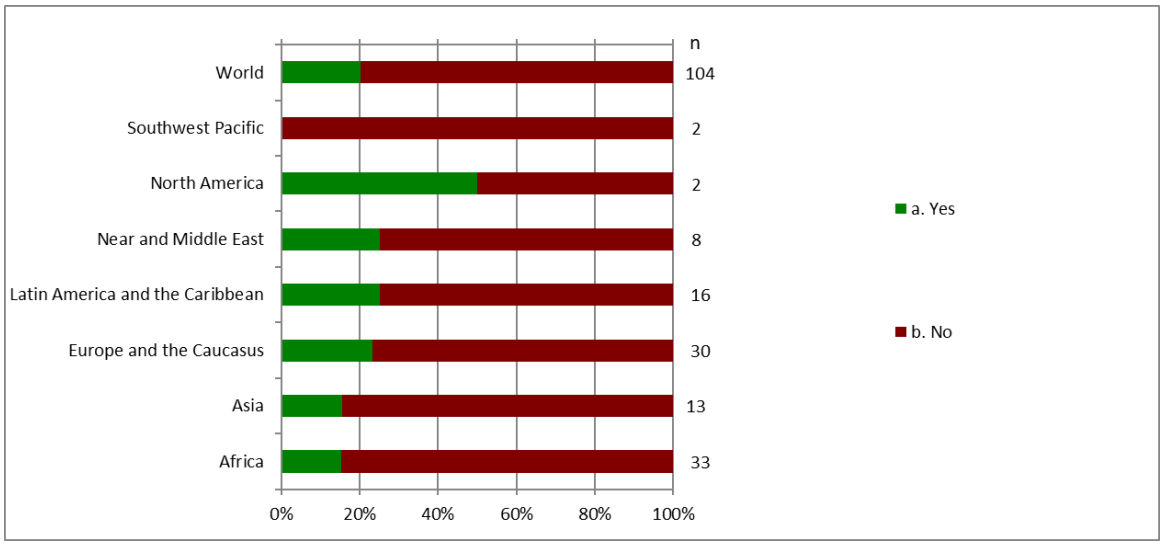


Conservation of breeds at risk?

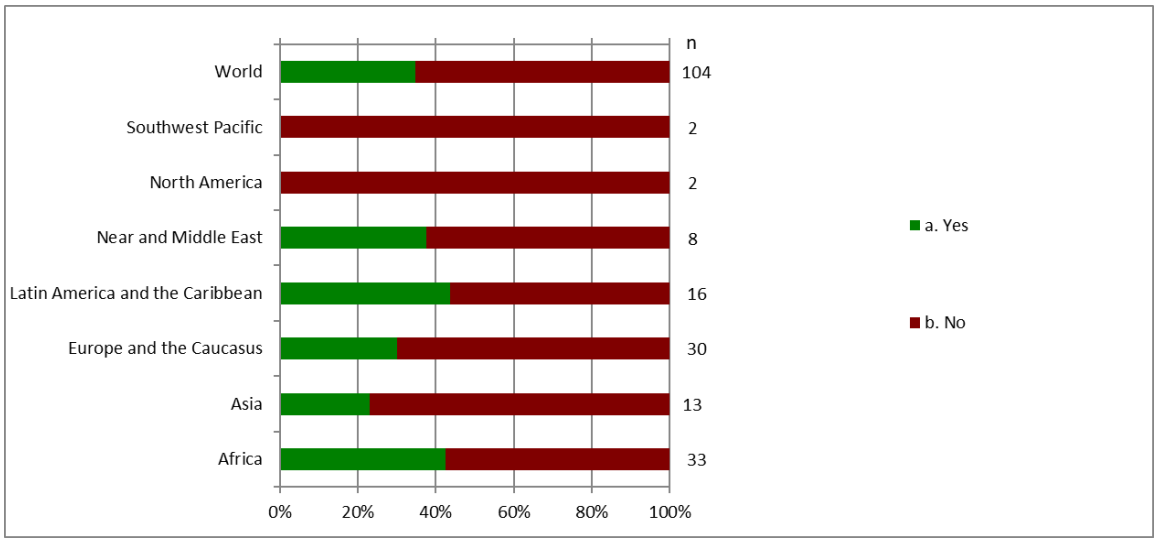


Almost 60 percent of reporting countries indicate that they have established or strengthened international collaborative activities in the field of characterization. More countries report international actions in this field than on sustainable use and development or on conservation. However, action is far more frequently reported in Europe and the Caucasus than in other regions. In the Southwest Pacific, action to date has been limited. Approximately 50 percent of reporting countries indicate that they have established or strengthened international collaborative activities in the field of sustainable use and development. Again, such initiatives are far more commonly reported from Europe and the Caucasus than from any other region. Slightly over 45 percent of reporting countries indicate that they have established or strengthened international collaborative activities in the field of conservation. No such initiatives are reported from the Southwest Pacific, and relatively few from Africa. Reported examples include the establishment of a European Union Reference Centre for Endangered Animal Breeds (EURC-EAB) in several European countries, the formation of partnerships between the Philippine Carabao Center (PCC) and research institutions in the Republic of Korea and Japan to work on buffaloes, and collaboration between Togo, Benin, Ghana and Côte d'Ivoire on aspects of managing national populations of regional transboundary breeds.

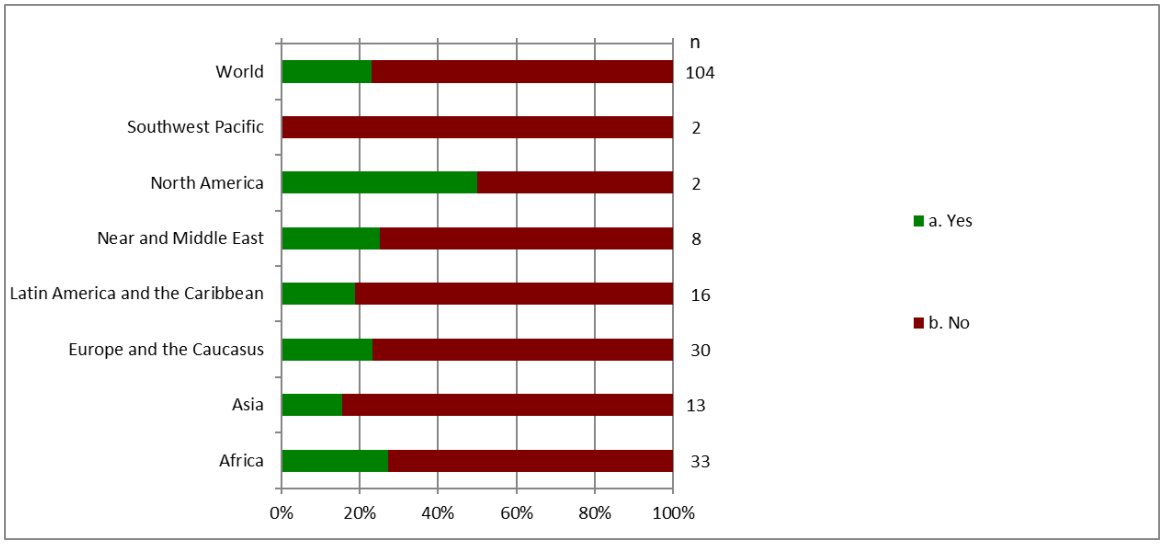
Figure A2.57 Q63. Are there any international NGOs active in your country in the fields of: Characterization?



Sustainable use and development?

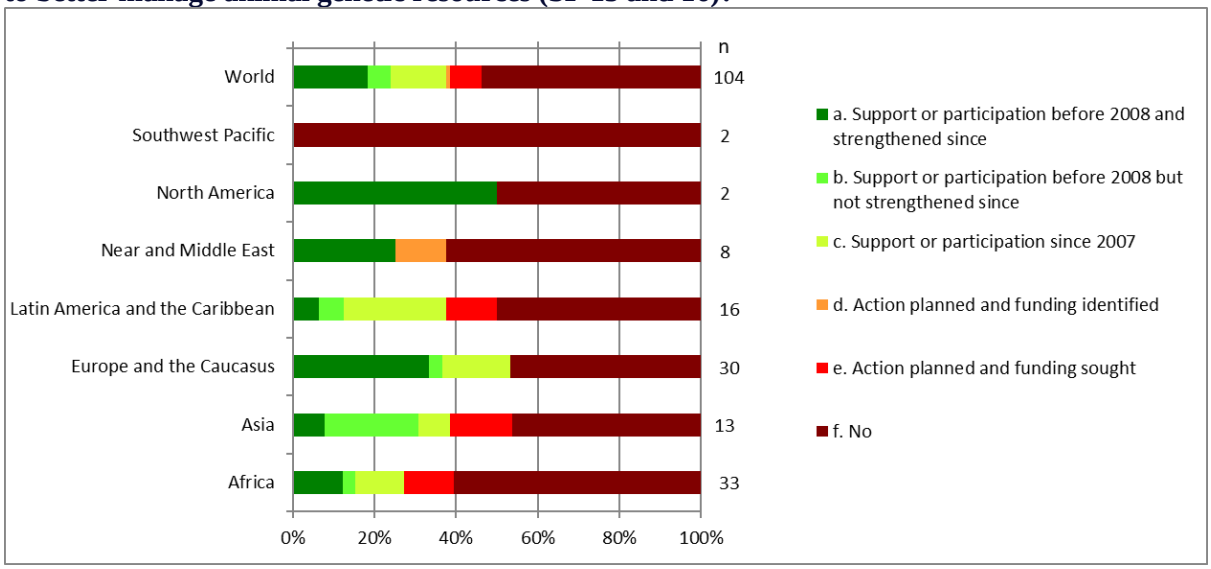


Conservation of breeds at risk?



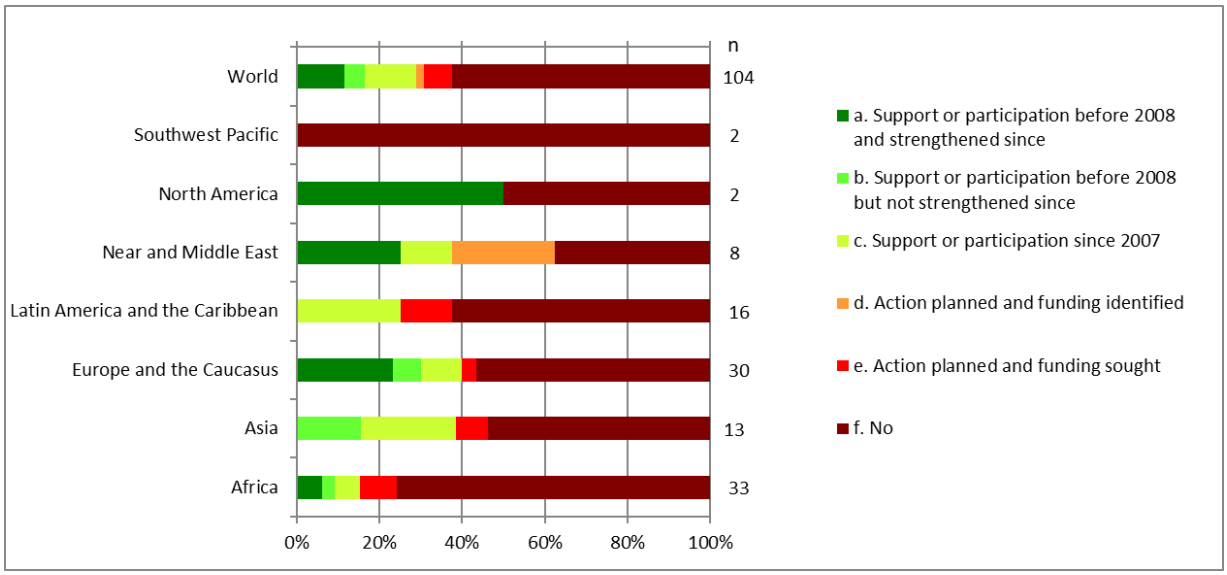
In all regions, the proportion of countries reporting activity by international NGOs on characterization, conservation, and sustainable use and development is 50 percent or less (in all three fields). The percentage is slightly higher in the field of sustainable use and development (35 percent versus 20 percent for characterization and conservation of breeds at risk). Several NGOs are mentioned frequently, both at regional level, including SAVE Foundation and Slow Food in Europe, Vétérinaires Sans Frontières International (VSF) in Africa, and RED CONBIAND in Latin America, and at global level, including VSF, the World Wildlife Fund and the Wildlife Conservation Society.

Figure A2.58 Q66. Has your country supported or participated in international research and education programmes assisting developing countries and countries with economies in transition to better manage animal genetic resources (SP 15 and 16)?



Approximately 40 percent of reporting countries indicate that they have supported or participated in international research and education programmes to assist developing countries and countries with economies in transition to better manage animal genetic resources. This activity was least common among countries from the Southwest Pacific, Africa and the Near and Middle East.

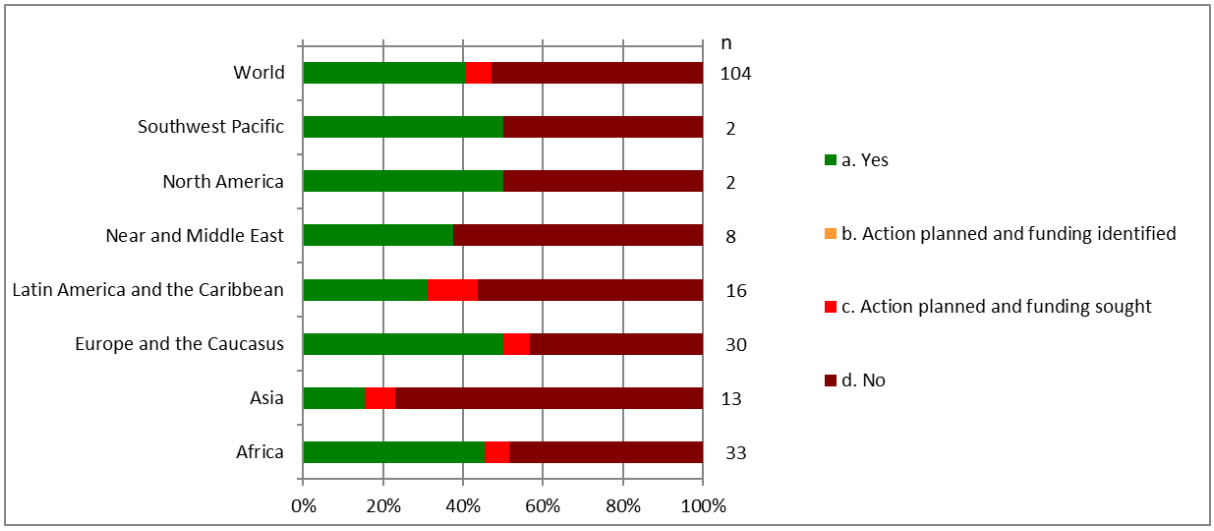
Figure A2.59 Q67. Has your country supported or participated in programmes aimed at assisting developing countries and countries with economies in transition to obtain training and technologies and to build their information systems (SP 15 and 16)?



Slightly less than 30 percent of reporting countries have supported or participated in programmes aimed

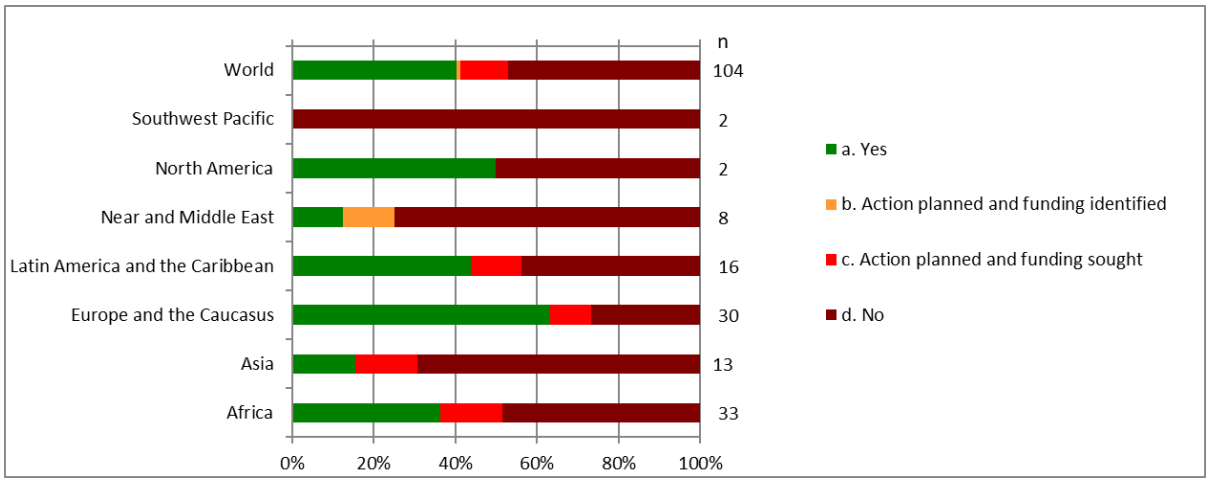
at assisting developing countries and countries with economies in transition to obtain training and technologies and to build their information systems. However, approximately 10 percent of countries have action of this kind planned. Around 40 percent of countries in Europe and the Caucasus, Asia and the Near and Middle East have been involved to some extent in such support programmes.

Figure A2.60 Q69. Has your country contributed to international cooperative inventory, characterization and monitoring activities involving countries sharing transboundary breeds and similar production systems (SP 1, Action 5)?



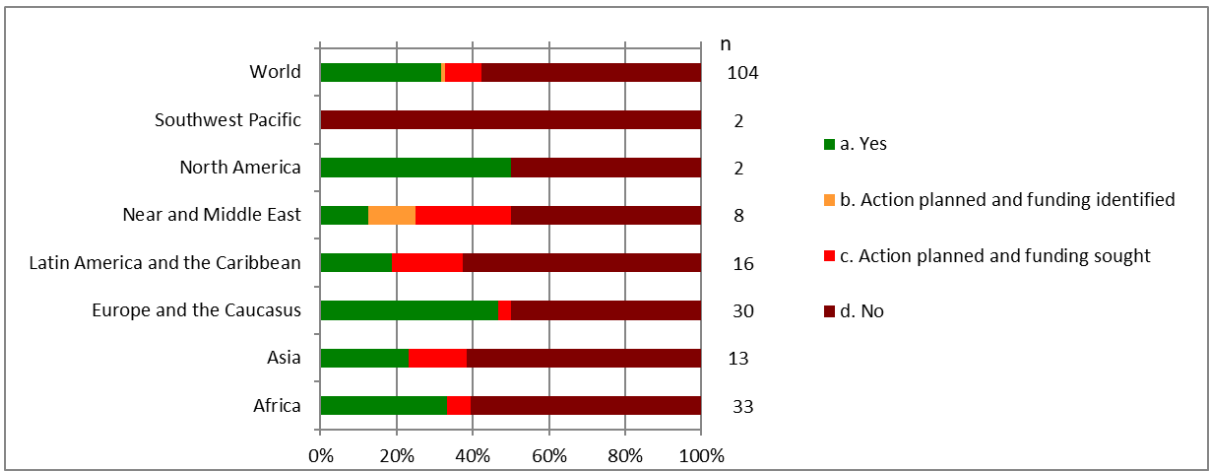
Approximately 40 percent of reporting countries have contributed to international cooperative inventory, characterization and monitoring activities involving countries that share transboundary breeds and have similar production systems. Figures are fairly uniform across regions, except for Asia, where less 20 percent of countries report such activities.

Figure A2.61 Q70. Has your country contributed to establishing or strengthening global or regional information systems or networks related to inventory, monitoring and characterization of animal genetic resources (SP 1, Action 6)?



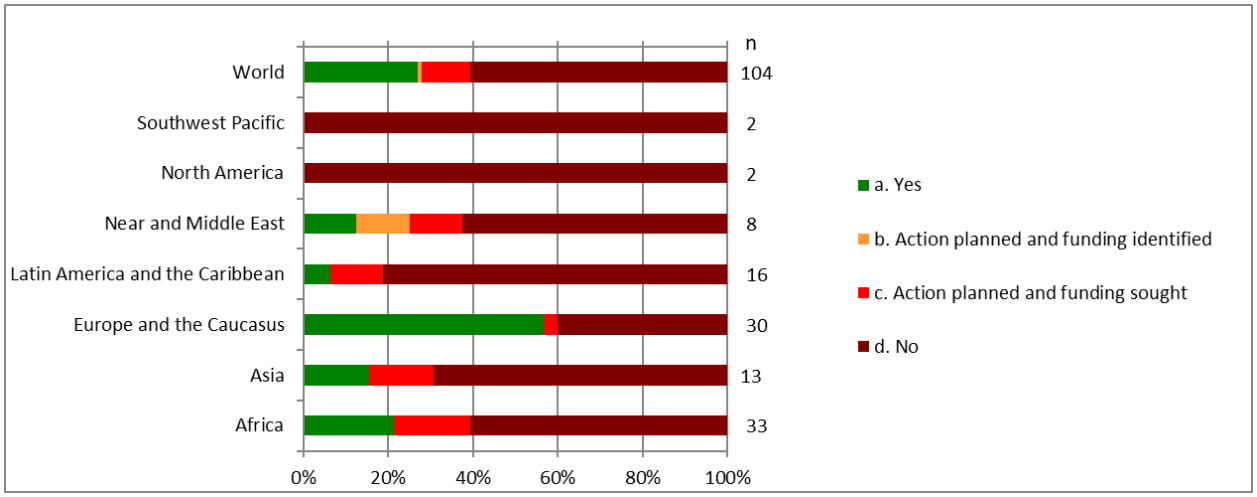
About 40 percent of reporting countries have contributed to establishing or strengthening global or regional information systems or networks related to inventory, monitoring and characterization of animal genetic resources (against 50 percent in 2020). Outside of DAD-IS and the European Farm Animal Biodiversity Information System (EFABIS), several regional systems are reported, including EUGENA in Europe, and Animal-GRIN in North America and Latin America and the Caribbean.

Figure A2.62 Q71. Has your country contributed to the development of international technical standards and protocols for characterization, inventory and monitoring of animal genetic resources (SP 2)?



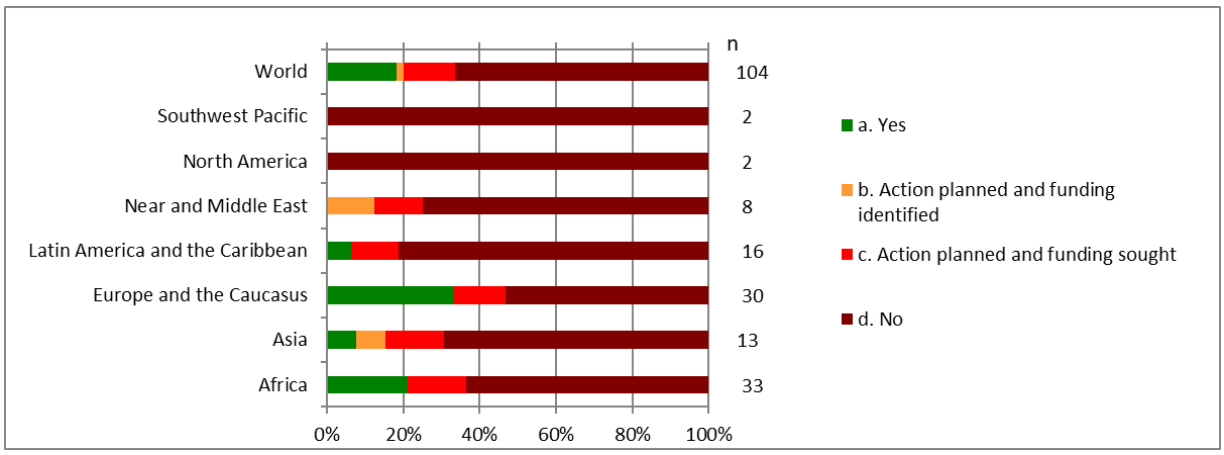
Approximately 30 percent of reporting countries contribute to the development of international technical standards and protocols for characterization, inventory and monitoring of animal genetic resources. Several countries report ongoing or past collaborations with the International Committee on Animal Recording (ICAR) and ERFP in Europe, as well as with AU-IBAR in Africa.

Figure A2.63 Q72. Has your country contributed to the development and implementation of regional *in situ* conservation programmes for breeds that are at risk (SP 8, Action 2; SP 10, Action 1)?



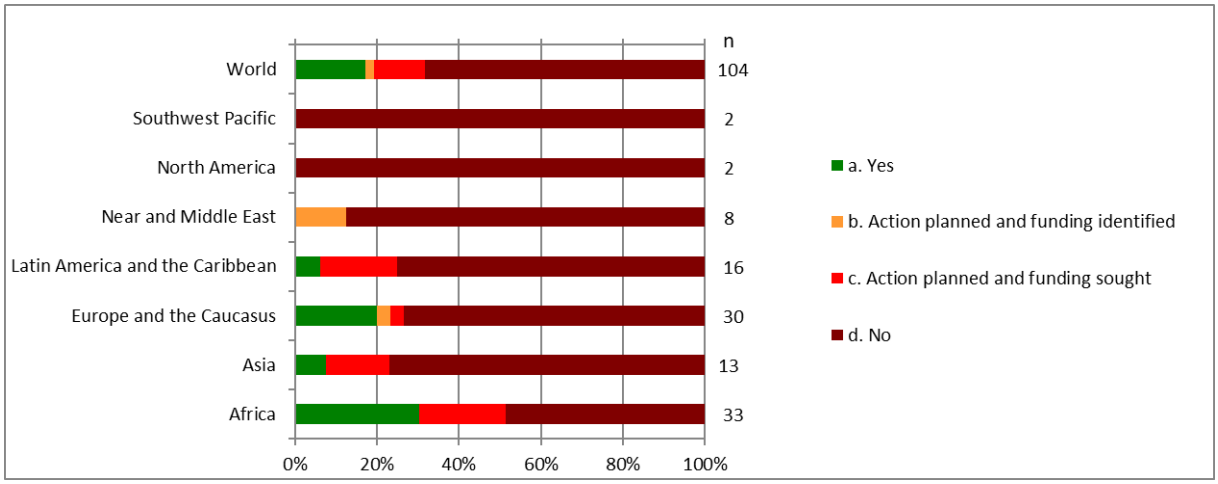
Less than 30 percent of reporting countries have contributed to the development and implementation of regional *in situ* conservation programmes for breeds that are at risk. The figure is almost 60 percent for Europe and the Caucasus, but countries from other regions have been active as well.

Figure A2.64 Q73. Has your country contributed to the development and implementation of regional *ex situ* conservation programmes for breeds that are at risk (SP 9, Action 2; SP 10, Action 3; SP 10, Action 4)?



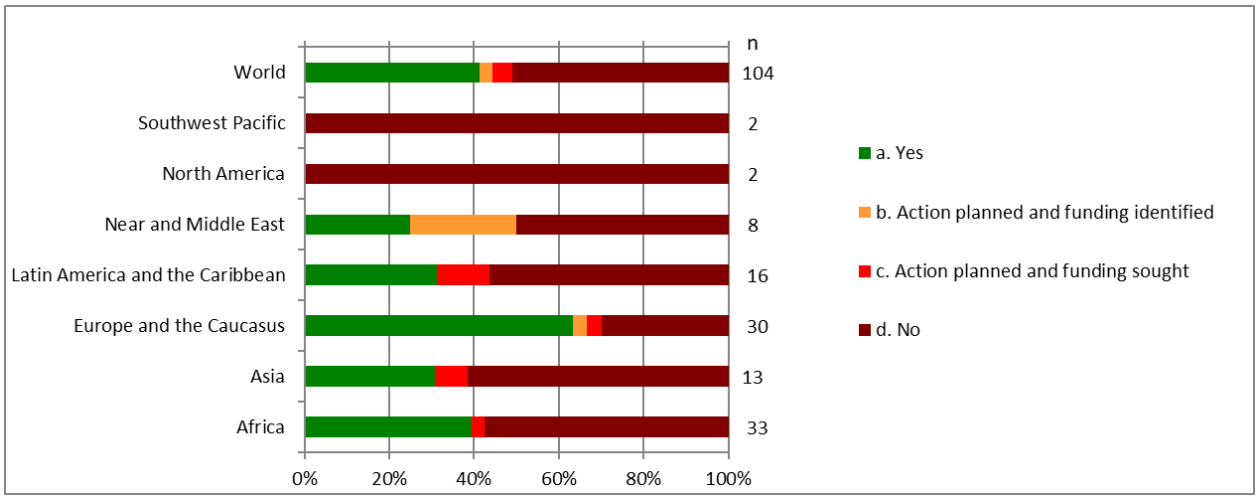
Less than 20 percent of reporting countries have contributed to the development and implementation of regional *ex situ* conservation programmes for breeds that are at risk (versus 30 percent in 2020). Several African countries report the development of regional gene banks in Burkina Faso and Uganda, although those activities are still in their infancy.

Figure A2.65 Q74. Has your country contributed to the establishment of fair and equitable arrangements for the storage, access and use of genetic material stored in supra-national ex situ gene banks (SP 9, Action 3)?



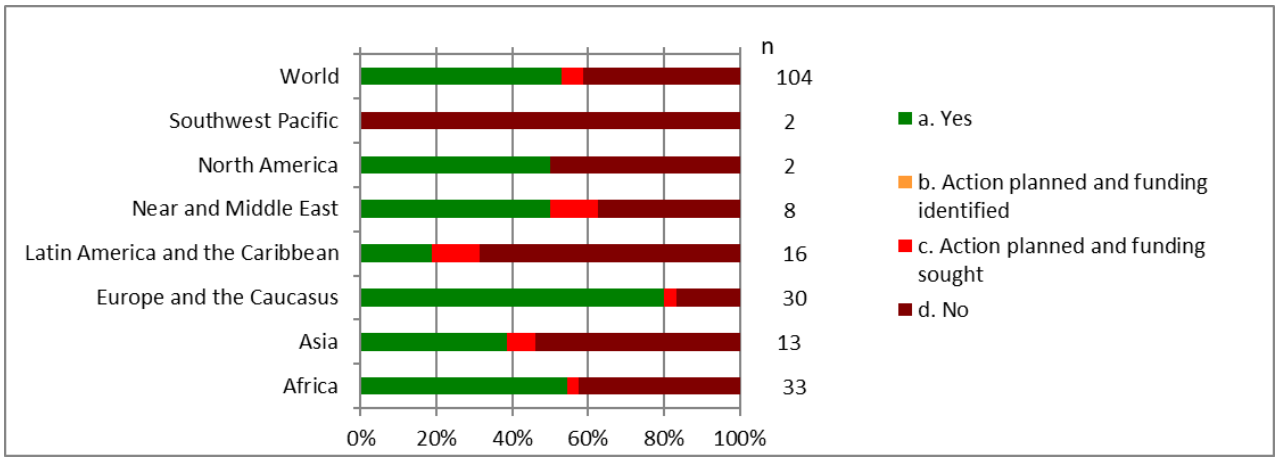
Less than 20 percent of reporting countries have contributed to the establishment of fair and equitable arrangements for the storage, access and use of genetic material stored in supra-national *ex situ* gene banks. More countries in Africa than in any other region report activities of this kind, perhaps because of the paucity of national gene banks in the region and consequent efforts by AU-IBAR to help establish regional facilities and collections.

Figure A2.66 Q75. Has your country participated in regional or international campaigns to raise awareness of the status of animal genetic resources (SP 19)?



Approximately 40 percent of countries report participation in regional or international campaigns to raise awareness of the status of animal genetic resources, with countries in Latin America and the Caribbean reporting the most activity. No countries from North America or the Southwest Pacific report such activities.

Figure A2.67 Q76. Has your country participated in reviewing or developing international policies and regulatory frameworks relevant to animal genetic resources (SP 21)?

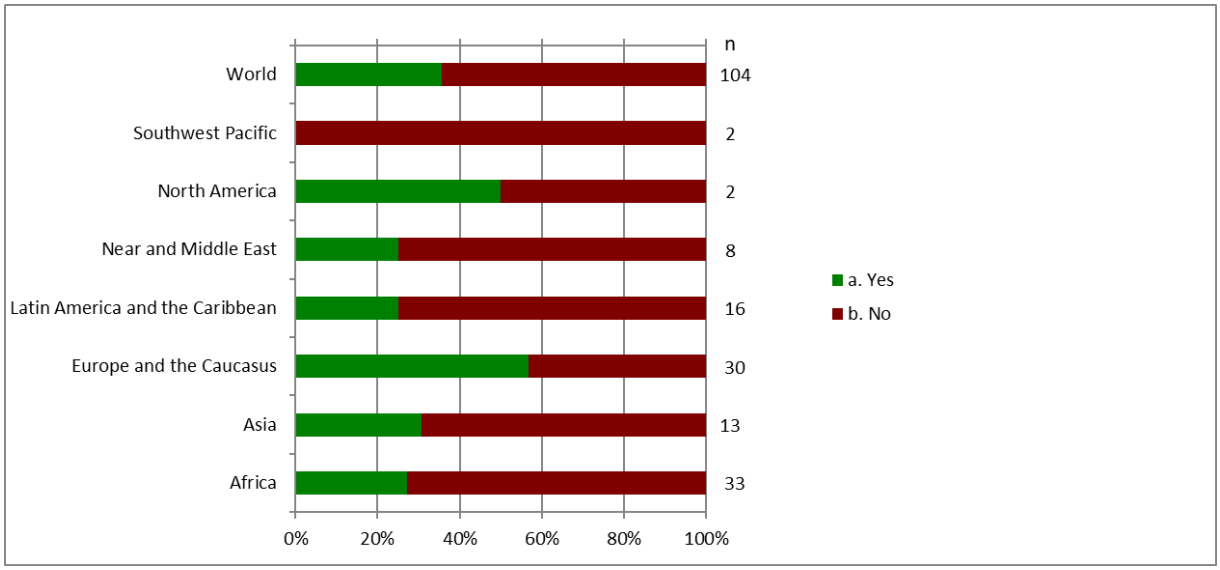


More than 50 percent of reporting countries participate in the review or development of international policies and regulatory frameworks relevant to animal genetic resources. The majority of these countries refer to work conducted under the auspices of FAO, but other activities, including those involving ERFP in Europe and AU-IBAR in Africa, as well as the Convention on Biological Diversity at global level, are also mentioned.

Implementation and financing of the Global Plan of Action: funding

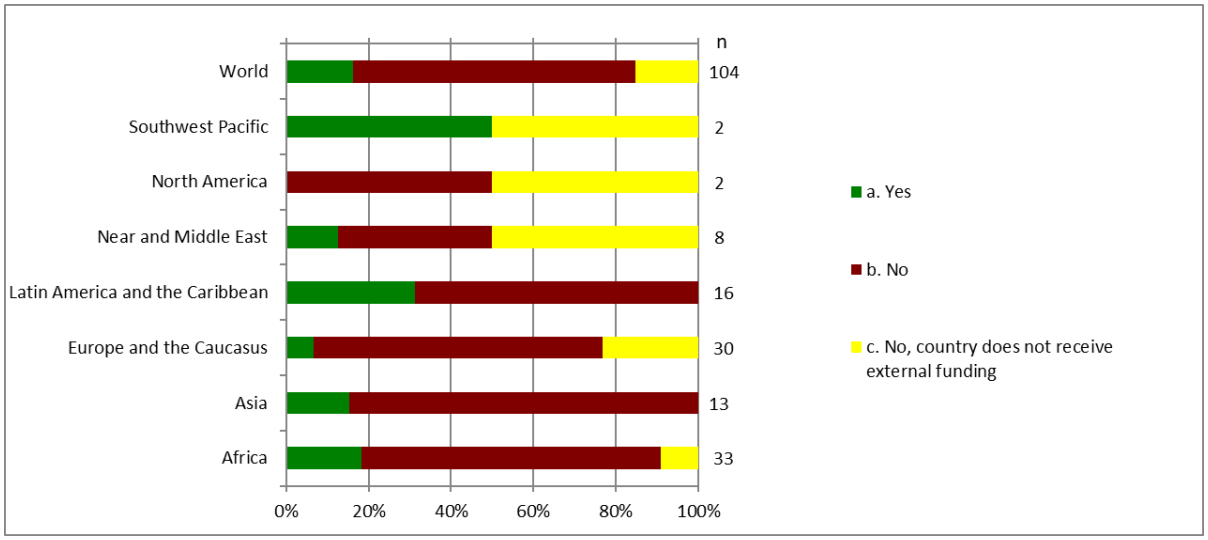
Indicator: The state of funding for the conservation, sustainable use and development of animal genetic resources

Figure A2.68 Q64. Has national funding for animal genetic resources programmes increased since the adoption of the GPA?



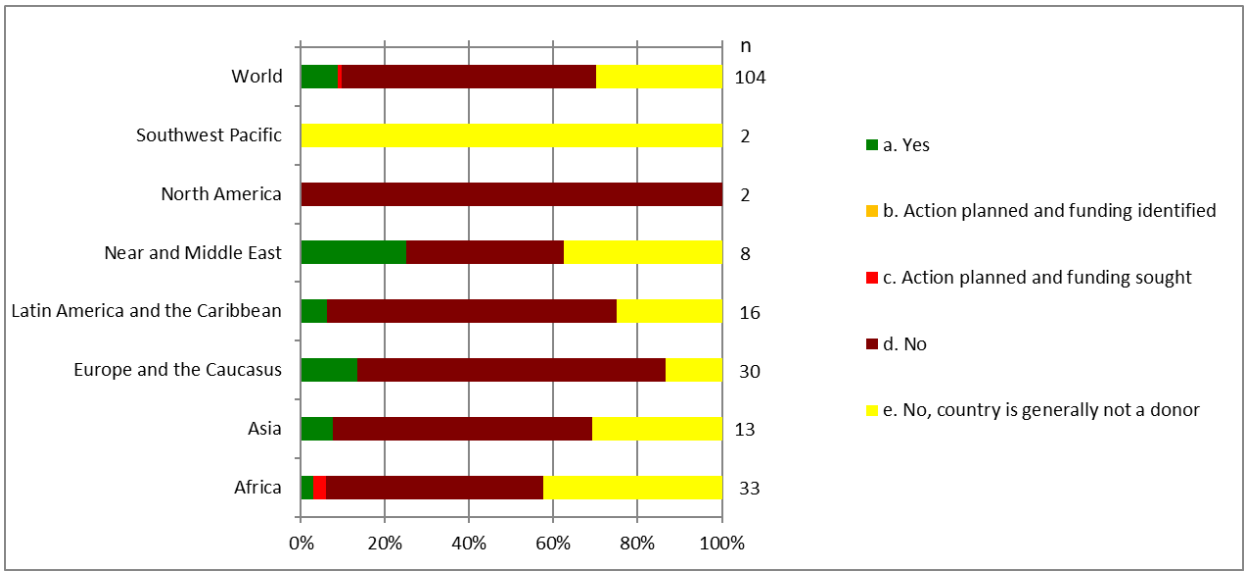
National funding for animal genetic resources management has increased since the adoption of the Global Plan of Action in less than 40 percent of reporting countries. North America and Europe and the Caucasus are the regions with the highest proportions of countries that have increased funding. Several countries, including Brazil, Italy, the Islamic Republic of Iran and Mexico, report a general or partial decrease in the availability of funding.

Figure A2.69 Q65. Has your country received external funding for implementation of the Global Plan of Action?



Less than 20 percent of reporting countries indicate that they received external funding for the implementation of the Global Plan of Action. Half of the countries in the Southwest Pacific and 30 percent in Latin America and the Caribbean report receiving such funding. Various sources of funding are cited, including FAO Technical Cooperation Programme projects, AU-IBAR, the African Development Bank, the World Bank and the Global Environment Facility (GEF).

Figure A2.70 Q68. Has your country provided funding to other countries for implementation of the Global Plan of Action?



Less than 10 percent of reporting countries indicate that they have provided funding to other countries for the implementation of the Global Plan of Action. Countries from Near and Middle East and Europe and the Caucasus have been the major donors, although countries in Latin America and the Caribbean, Asia and Africa also report such activities, evidence that South–South cooperation is occurring.