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FAO REGIONAL CONFERENCE FOR THE NEAR EAST

Thirty-seventh Session

Building Resilience through Transforming Agrifood Systems

Executive Summary

With fragile agro-silvo-pastoral and natural ecosystems, remarkable scarcity of water and arable land, heavy dependence on food imports and high population growth, the Near East and North Africa (NENA) region is inherently vulnerable to shocks of various origins, causing complex and overlapping disasters seriously affecting the region's agrifood systems and related actors, particularly the rural poor and agricultural-based livelihoods. In 2022, over 170 million people (36.6 percent of the region's population) were affected by moderate or severe food insecurity. The number of undernourished/hungry people escalated to 59.8 million (12.9 percent of the population), the highest since 2019 and 75 percent higher than 2000. About 73 percent of the region's population affected by hunger in 2022 resides in countries affected by conflict. Disasters and crises, especially those caused by conflict, climate extremes, economic shocks and plant pests, and animal and plant diseases are the main factors behind the steady increase in food insecurity in the region since 2014.

Evidence shows that achieving the Sustainable Development Goals (SDGs) in the region would not be possible without building inclusive and resilient agrifood systems that address structural fragility, long-term stresses, as well as multiple and colliding shocks. Therefore, resilience building has been one of FAO's priorities in NENA since 2014, adopting a systemic approach aiming at building the capacities and resources of systems, institutions and people to prevent, anticipate, absorb, adapt and transform in the face of multiple and often colliding shocks, disasters and crises.

This paper analyses some of the major shocks affecting the region's agrifood systems and their impact on food security, nutrition and livelihoods, and it highlights FAO's work on resilience building. The paper suggested some actions to be considered by the FAO Regional Conference for the Near East.

Suggested action by the Regional Conference

The Regional Conference calls upon Members to:

- a. Adopt a holistic approach to build resilience and proactively manage agrifood systems' risks, including through:
 - i. establishing or strengthening a multi-hazard set-up that cuts across different ministries and entities involved in agriculture and food sectors;

- ii. formulating effective, evidence-based, inclusive (including gender, youth and most vulnerable groups) and risk-informed policies, strategies and plans;
 - iii. establishing or strengthening actionable early warning systems complemented with triggers for anticipatory action;
 - iv. establishing flexible financing mechanisms for timely and appropriate anticipatory actions; and
 - v. expanding the coverage and effectiveness of social protection systems as well as crop and livestock insurance systems, ensuring that they are shock-responsive, gender and age, nutrition and risk-sensitive.
- b. Adopt a One Health approach to effectively manage biological hazards and risks within and across the human-animal-plant sectors.
 - c. Strengthen regional collaboration, including through:
 - i. the establishment of a regional disaster preparedness and emergency trust fund; and
 - ii. promoting and sustaining peace in the region given the remarkable impacts of conflicts.

The Regional Conference invites FAO to:

- a. Continue to generate evidence to inform holistic management of multiple risks.
- b. Pilot and promote innovative approaches and practices for effective management of multiple risks, including those related to disaster risk reduction and climate-smart agriculture good practices on-farm and off-farm, including early warning systems, anticipatory actions, conflict-sensitive and peace-responsive programming, shock-responsive, gender- and age-, nutrition- and risk-sensitive social protection and crop and livestock insurance.
- c. Continue to support countries of the region in collaboration with relevant stakeholders, in formulating and implementing One Health strategies, plans and programmes and addressing transboundary pests and diseases.
- d. Technically support Members in establishing early warning systems/observatories at country, subregional and regional levels, and in developing anticipatory action protocols and contingency plans.
- e. Promote the exchange of knowledge and good practices among Members on topics related to resilience building.
- f. Increase its support to countries affected by conflicts, in line with FAO's mandate.

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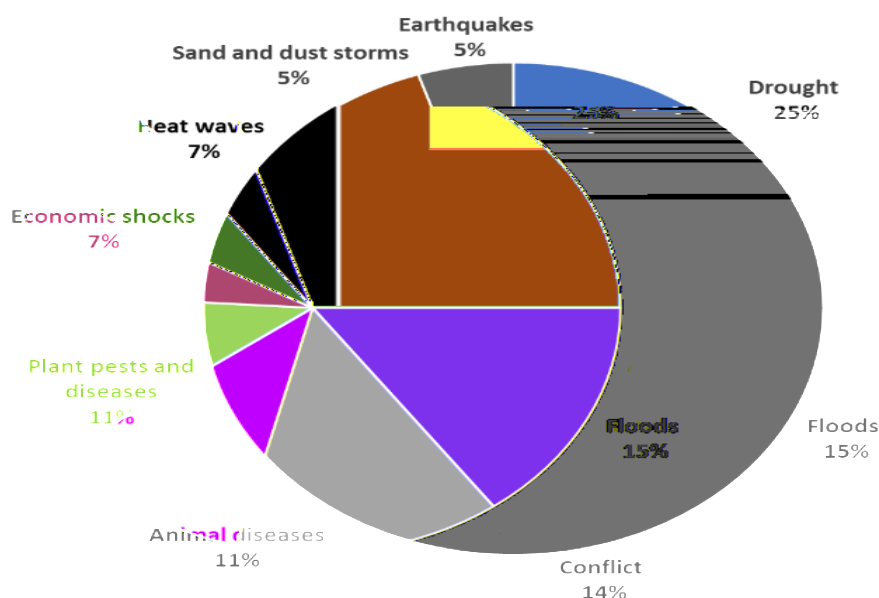
RNE NERC Secretariat
FAO-RNE-NERC@fao.org

I. Typologies of Risks and Impact Channels on Food Security and Poverty

1. The Near East and North Africa (NENA) region is characterized by chronic vulnerability to shocks and stresses, mainly caused by the region's fragile agro-silvo-pastoral and natural ecosystems, heavy dependence on food imports and high population growth, among others. With 0.3 hectares (ha) of agricultural land per capita and per capita water availability at 10 percent of the global average, the region is the most agricultural land- and water-scarce in the world. The region's climate is predominantly arid to semi-arid with high temperatures and low precipitation, making the region prone to adverse impacts of climate change with its cohort of climate extremes and slow onset events. Heavy dependence on food imports exposes many countries of the region to economic shocks. The multidimensional impact of the region's high population growth includes, partially, the massive reduction of 63 percent of per capita cropland during the period 1961 to 2020 (from 0.441 ha/per person to 0.157).¹

2. The NENA region is remarkably prone to the impact of severe natural and manmade hazards. Key informants from 15 countries of the region identified climate-related hazards as the most common in the region - in terms of frequency (52 percent), followed by conflict (12 percent), animal diseases (11 percent), and plant pests and diseases (11 percent) as shown in Figure 1,² while conflict has been identified as the most serious in terms of impact.

Figure 1: Common hazards and risks to agrifood systems in NENA region



3. In the NENA region, hazards often evolve into complex and overlapping disasters and crises due to the region's chronic vulnerability and its low resilience capacity. Disasters seriously affect the region's agrifood systems and related actors. The most impacted groups include the rural poor whose livelihoods heavily depend on agriculture - particularly rain-fed agriculture, and directly affected by conflicts. FAO's research revealed that the region's smallholders who depend on rainfed agriculture and face overlapping shocks (such as conflict, climate extremes, and economic shocks as in Sudan, Syrian Arab Republic and Yemen) are the most affected by disasters³. One of the most direct ways in which disasters and crises affect agriculture is through reduced production which results in direct economic loss to producers. This often cascades along the entire value chain, affecting social and economic growth and rural livelihoods. Figure 2 illustrates how reduced production affects food security⁴ affecting all dimensions of food security.

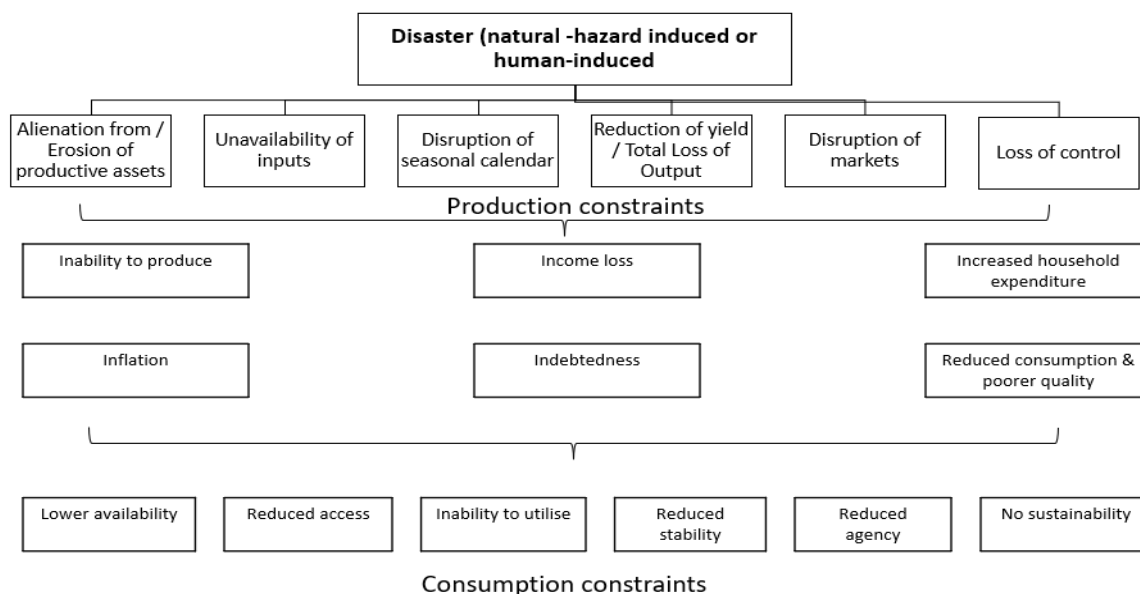
¹ FAOSTAT 2021

² Regional Disaster Risk Reduction Profile, FAO, 2021 (update in 2023).

³ *Near East and North Africa Region Disaster Risk Reduction Profile*, FAO-RNE, 2022 (unpublished)

⁴ *Near East and North Africa Region Disaster Risk Reduction Profile*, FAO-RNE, 2022 (unpublished)

Figure 2. Impact of disasters on food security⁵



4. In 2022, about 170.1 million people in the NENA region (36.6 percent of the population) were affected by moderate or severe food insecurity, including 59.8 million undernourished/hungry people (12.9 percent of the population), the highest since 2019 and 75 percent higher than 2000.⁶ Disasters and crises – especially those caused by conflict, climate extremes, economic shocks and plant pests, and animal and plant diseases, are the main factors behind the steady increase in food insecurity in the region since 2014⁷.

5. Despite lower frequency compared to drought and flood, conflict remains to be the main driver of hunger in the NENA region since 2011. The region is currently home to a large number of conflicts in the world and bears the largest costs of violence in the world⁸. About 73 percent of the region's population affected by hunger in 2022 resides in countries affected by conflict. Five of the top ten countries affected by food crises in 2022 are from the region (Afghanistan, Pakistan, Sudan, Syrian Arab Republic and Yemen) with four affected by conflicts⁹. In addition to death and humanitarian tragedies, conflict directly causes hunger by disrupting food systems, destroying infrastructure, reducing access to markets, causing forced migration including displacement away from production areas, increasing food prices or making goods and services unavailable altogether, among others. Moreover, conflict is a key driver of increasing food insecurity trends in urban areas in the region such as in Palestine, Sudan, and Syrian Arab Republic, mainly due to its direct impact on food supplies and prices. In addition to its immediate impacts, conflict causes profound long-term consequences that impede the full realization of resilient and sustainable development. On average, conflicts cost a country an accumulated loss of 15 percent of Gross Domestic Product (GDP) growth, reduced life expectancy by about one year, increased infant mortality rates by 10 percent, and undernourishment by 3.3 percent.¹⁰

⁵ *Near East and North Africa Region Disaster Risk Reduction Profile*, FAO-RNE, 2022 (unpublished)

⁶ FAO, IFAD, UNICEF, WFP and WHO. 2023. *The State of Food Security and Nutrition in the World 2023*. Urbanization, agrifood systems transformation and healthy diets across the rural–urban continuum. Rome, FAO. <https://doi.org/10.4060/cc3017en>

⁷ *The Near East and North Africa - Regional Overview of Food Security and Nutrition 2022: Trade as an enabler for food security and nutrition*, FAO-RNE, 2023

⁸ Global Peace Index - 2017, Institute for Economics and Peace

⁹ 2023 *Global Report on Food Crises*, FSIN and Global Network Against Food Crises. 2023. *GRFC 2023*. Rome.

¹⁰ Gates, Scott & Hegre, Håvard & Nygård, Håvard Mogleiv & Strand, Håvard, 2012. *Development Consequences of Armed Conflict*, *World Development*, Elsevier, vol. 40(9).

6. The frequency and severity of climate and extreme weather-related events are increasing globally and in the region. Analysis of the first Nationally Determined Contributions (NDCs) to the Paris Agreement submitted by the countries in the NENA region recognized floods (70 percent of the countries), droughts (65 percent), and sand and dust storms (53 percent) as major disaster risks affecting agriculture and driving food insecurity in the region.¹¹ This is consistent with the global trend, as agriculture – including crops, livestock, forestry, fisheries, and aquaculture – has absorbed 23 percent of the total impact caused by climate-related disasters across all sectors between 2008 and 2021¹².

7. A number of NENA countries were affected by floods in 2022, including Kuwait, Oman, Pakistan, Saudi Arabia, United Arab Emirates and Yemen, impacting agricultural production and agricultural livelihoods. On the other hand, a recent analysis by the World Weather Attribution revealed that high temperatures caused by climate change are driving drought in large parts of Iran (Islamic Republic of), Iraq and Syrian Arab Republic. In Iraq, the 2020-2021 rainfall season was the second driest in 40 years, leading to a 29 percent and 73 percent drop in water flow in the Tigris and Euphrates rivers, respectively¹³. In the Syrian Arab Republic, where around 70 percent of the wheat relies on rainfall, 2021-2022 cereal production was below average, largely due to erratic weather patterns¹⁴. Similarly in Morocco, cereal production has been below average, given that four of the past five agricultural seasons had been affected by drought.¹⁵

8. Animal diseases and plant pests and diseases are major biological threats to agrifood systems accentuated in past decades by trade activities, movement of people, plants and animals, climate change and conflicts.

9. The last Desert Locust upsurge in 2021 and 2022 affected 16 countries in the Near East region¹⁶. Additionally, the most serious transboundary plant pests in the region include Fall Armyworm (*Spodoptera frugiperda*), Red Palm Weevil (*Rhynchophorus ferrugineus*) and Fruit flies. Invasive weeds such as Water Hyacinth (*Eichhornia crassipes*) and Paulownia tree (*Ailanthus altissima*) are also causing significant damage to the region's already degraded rangelands.

10. Transboundary animal diseases (TADs) result in direct loss of animals and significant reduction in animal productivity estimated at 20 percent, while zoonotic diseases¹⁷ extend beyond animal health to human health and lives, affecting livestock trade and products. The most serious TADs in the region include Foot-and-Mouth Disease (FMD) and *la Peste des petits ruminants* (PPR) while the most significant zoonotic diseases include *Brucellosis*, Rift Valley Fever (RVF), Middle East Respiratory Syndrome Coronavirus (MERS-CoV), Crimean Congo Haemorrhagic Fever (CCHF) and Bovine Tuberculosis.

11. NENA is a net-food importing region, severely affected by global food supply and price shocks. The Russian Federation and Ukraine account for 75 percent of the total wheat and wheat flour imports of Egypt and Lebanon. The global increase in the costs of energy and fertilizer and the reduction in global food production from the war in Ukraine increased domestic food prices in some countries (for example: 171 percent in Lebanon, 21.9 percent in Egypt, and 11 percent in Morocco), which contributed to a negative trade balances and currency depreciation.

¹¹ Regional Analysis of the Nationally Determined Contributions in the Near East and North Africa: Gaps and Opportunities in the Agriculture and Land Use Sector, FAO, 2021 (unpublished report)

¹² FAO, The impact of disasters on agriculture and food security, 2023

¹³ <https://www.worldweatherattribution.org/human-induced-climate-change-compounded-by-socio-economic-water-stressors-increased-severity-of-drought-in-syria-iraq-and-iran/>

¹⁴ <https://www.fao.org/giews/countrybrief/country.jsp?lang=ar&code=SYR>

¹⁵ <https://www.fao.org/giews/countrybrief/country.jsp?code=MAR&lang=en>

¹⁶ Bahrain, Egypt, Iran (Islamic Republic of), Iraq, Jordan, Kuwait, Lebanon, Oman, Pakistan, Qatar, Saudi Arabia, Somalia, Sudan, Syrian Arab Republic, United Arab Emirates and Yemen

¹⁷ Zoonotic disease is an infectious disease caused by a pathogen that has jumped from a non-human animal (usually a vertebrate) to a human. Typically, the first infected human transmits the infectious agent to at least one other human, who, in turn, infects others.

II. Conceptual and Regional Operational Framework on Resilience

12. Building resilience has been one of the key priorities of FAO in the NENA region since 2015. The 32nd Session of the FAO Regional Conference for the Near East (NERC 32, Rome, 24 - 28 February 2014) called upon FAO to launch the Regional Initiative on Building Resilience for Food Security and Nutrition in the Near East and North Africa Region (RI-FSN), which was implemented during the period June 2014 - December 2021, focusing on: a) food security information systems; b) Disaster Risk Reduction and Climate Resilience; and c) transboundary animal, plant (including forests) and fish pests and/or diseases.

13. Building on learning from RI-FSN and following the approval of NERC 36 (Baghdad, Iraq, 7-8 February 2022), the FAO Regional Office for the Near East and North Africa (FAO RNE) commenced, in March 2022, the implementation of the Regional Priority (RP) on Building Resilience to Multiple Shocks (RP4 – Resilience Building).

14. The RP4 - Resilience Building, adopts the UN Common Guidance on Helping Build Resilient Societies, which defines resilience as “the ability of individuals, households, communities, cities, institutions, systems and societies to prevent, resist, absorb, adapt, respond and recover positively, efficiently and effectively when faced with a wide range of risks, while maintaining an acceptable level of functioning without compromising long-term prospects for sustainable development, peace and security, human rights and well-being for all”¹⁸. Systems, institutions and people are considered resilient when they have at their disposal the following set of distinct capacities: a) anticipative capacity; b) preventive capacity; c) absorptive capacity; d) adaptive capacity; and e) transformative capacity¹⁹.

15. Working towards increasing resilience capacity in the region, the target groups of the RP4 -Resilience Building are:

- a. **agrifood systems that are more vulnerable to multiple shocks and stresses, such as those highly dependent on rain-fed agriculture, agro-pastoralism and pastoralism;**
- b. vulnerable people whose livelihoods depend on food and agriculture (crops, livestock, fisheries, aquaculture, forests) and other renewable natural resources and related food sectors along value chains. **Within this group, special attention is given to women, youth, internally displaced people, refugees and their hosting communities;**
- c. **marginal, traditional and indigenous communities with agriculture and food-based livelihoods that are vulnerable to multiple shocks and stresses; and**
- d. **relevant local, sub-national, national and regional institutions and stakeholders involved in agrifood systems.**

16. Working closely with all relevant divisions and FAO Programme Priority Areas (PPAs), the main functions of the RP4 – Resilience Building are:

- a. providing, mobilizing and facilitating access of Members and FAO Country Offices to technical expertise on resilience building;
- b. sharing learning, tools, methodologies and best practices;
- c. building capacity of Members, Regional Institutions and FAO teams on matters related to resilience;
- d. generating evidence to inform advocacy and programming; and
- e. Interlocutor with/and a convener of regional bodies (such as the League of Arab States and its agencies, UN agencies, regional Financial Institutions, etc.) to influence policy, programmes, and resources.

¹⁸ UN. UN Common Guidance on Helping Build Resilient Societies, 2020.

<https://unsdg.un.org/sites/default/files/2021-09/UN-Resilience-Guidance-Final-Sept.pdf>.

¹⁹ The State of Food and Agriculture: Making agrifood systems more resilient to shocks and stresses, FAO, 2021.

III. Increasing Resilience of Agrifood Systems:

Tailored Solutions to the Context of the Near East and North Africa Region

17. The RP4 – Resilience Building applies a holistic risk management approach to strengthen resilience capacities by focusing on five strategic action areas aiming at: a) understanding multiple risks; b) strengthening disaster risk and crisis governance; c) reducing risks and vulnerabilities; d) strengthening One Health approach against all biological threats; and e) enhancing anticipatory actions, emergency preparedness and response. These actions areas are being implemented at country level in view of the specific contexts.

18. **Strategic action area 1: Understanding multiple risks:** Different shocks and stresses impact different agrifood systems differently depending on their location and exposure, types of livelihoods and characteristics of vulnerability, gender and age groups. Reliable context-specific information and comprehensive multi-risk assessments are essential prerequisites for holistic management of compounded risks. The main actions under this strategic action area include:

- a. supporting countries in establishing, implementing and institutionalizing functional agro-climatic, disaster and crisis risk information systems;
- b. supporting countries and relevant regional stakeholders – including through capacity building and knowledge sharing – in establishing and strengthening, in view of the country's hazards profile, individual and multi-hazard early warning systems supported with triggers for anticipatory action;
- c. strengthening and supporting country level capacity for immediate damage and loss assessment and damage and loss information system, multi-risk and vulnerability assessments, resilience measurements and social, economic and environmental risk and conflict analyses; and
- d. in countries affected by conflicts, supporting countries adhering to conflict-sensitive programming measures and promoting humanitarian-development-peace nexus.

19. **Strategic action area 2: Strengthening disaster risk and crisis governance:** Robust disaster risk reduction and management policies, institutions and coordination mechanisms are key for effective governance to address multiple and often colliding risks and cascading crisis, within and across sectors and systems. About 79 percent of the countries in the NENA region have national disaster risk management (DRM) strategies, yet the majority are outdated²⁰. The main actions under this strategic action area are:

- a. supporting countries, including through capacity building, technical support and knowledge sharing, in developing and updating national/sectoral disaster risk reduction and management policies and plans with a specific focus on building resilient agriculture and food systems. These include, for instance, developing disaster risk reduction action plans within the agriculture strategies (e.g. Egypt), management of transboundary plant pests and animal and fish diseases (e.g. Saudi Arabia), and conflict-sensitive value chain development plans (e.g. Palestine, Sudan, Syrian Arab Republic and Yemen);
- b. developing national and regional institutional capacities to mainstream gender and age considerations in disaster risk reduction/management;
- c. contributing to supporting and influencing resilience agenda in regional platforms; and
- d. promoting regional collaboration including through advocacy and technical support to countries to establish regional disaster preparedness and emergency fund.²¹

²⁰ *Near East and North Africa Region Disaster Risk Reduction Profile*, FAO-RNE, 2022 (unpublished).

²¹ Recommended by the Regional Consultation Technical Meeting organized by FAO Regional Office for the Near East and North Africa Reion (RNE) during the period 23 - 25 October 2023 as part of the preparations for the 37th Session of FAO Regional Conference for the Near East (NERC 37).

20. **Strategic action area 3: Reducing multiple risks and vulnerabilities:** Investing in reducing risks and vulnerabilities is key to building resilient agrifood systems. Measures at both farm and institutional levels are important to reduce vulnerabilities, risk exposure and the likelihood of being impacted by multiple hazards.²² The main actions under this strategic action area include:

- a. supporting countries in adopting or expanding various risk and vulnerability reduction interventions at farm and landscape level through climate adaptive agriculture practices and on-farm risk reduction activities, among others (e.g. climate smart agriculture in Jordan, Lebanon and Palestine; good agricultural practices in Egypt, Saudi Arabia and Tunisia; and soil health measures in the Sudan);
- b. supporting countries in developing and strengthening risk and vulnerability reduction measures at an institutional level, including shock-responsive and risk- and gender-sensitive social protection systems (e.g. in Lebanon, Mauritania and Jordan); and risk transfer systems such as crop and livestock insurance (e.g. in Morocco); and
- c. supporting the integration of multiple risk and vulnerability reduction measures within FAO programmes, with emphasis on strengthening resilience programming capacities in conflict affected areas.

21. **Strategic action area 4: Strengthening One Health approach against biological threats:** The One Health approach is a coordinated, collaborative, multidisciplinary and cross-sectoral approach to address risks that originate at the animal-human-ecosystem interface, involving human, animal and plant health, Antimicrobial Resistance, food safety and the environment. The One Health approach is key for the effective management of biological hazards and risks that threaten food chains. The main actions under this strategic action area are:

- a. in collaboration with relevant stakeholders, supporting countries in strengthening food chain crisis emergency management through improved preparedness, anticipatory action and response for food chain emergencies;
- b. supporting countries in evidence generation to inform management of emerging zoonotic diseases;
- c. supporting the implementation of quarantine standards to control transboundary animal diseases and plant pests and diseases with particular focus on countries affected by conflict;
- d. supporting countries in establishing and strengthening food safety measures and protocols; and
- e. strengthening collaboration on One Health Systems, including through:
 - i. supporting the establishment of a regional One Health Platform in collaboration with relevant stakeholders;
 - ii. supporting the establishment of a regional committee for sustainable management of transboundary plant pests and diseases;
 - iii. advocating for and supporting the establishment of regional Trust Fund(s) to strengthen sustainable management of transboundary pests and diseases; and
 - iv. supporting the establishment and capacity building of Antimicrobial Resistance and One Health coordination mechanisms at country and regional levels.

22. **Strategic action area 5: Enhancing anticipatory actions, emergency preparedness and response:** While deterring avoidable food crises is a priority, it should not undermine the importance of medium to longer-term resilient and sustainable humanitarian actions. Development programmes and peacebuilding should be implemented in an integrated manner. The main actions under this strategic action area include:

²² The net economic benefit of farm-level disaster risk reduction (DRR) good practices are 2.5 times higher than usual practices by famers, livestock raisers and fishers – Benefits of farm level disaster risk reduction practices in agriculture. FAO 2017.

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- a. supporting countries – especially those most exposed to hazards, in strengthening emergency preparedness for effective response and recovery capacities including through: i) effective contingency planning; and ii) developing mechanisms for anticipatory actions;
 - b. strengthening the quality of emergency response and recovery programmes by supporting and building capacities for:
 - i. embedding longer-term resilience building within humanitarian activities to withstand shocks, reduce risks, protect development gains and promote peace;
 - ii. applying the principles of humanitarian-development-peace nexus;
 - iii. strengthening evidence-based programming through structured and deliberate capture and sharing of lessons and good practices;
 - iv. ensuring conflict sensitivity and standards for accountability to affected populations are adhered across resilience programs; and
 - v. mainstreaming nutrition, gender and age dimensions into the design, implementation and monitoring of policies and resilience programmes.