Parliamentary Assembly
Assemblée parlementaire
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COUNCIL OF EUROPE
CONSEIL DE L'EUROPE

Doc. 16425
05 June 2026

Food challenges and responses: the experience of Morocco

Information report[1]
Committee on Social Affairs, Health and Sustainable Development
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1. Introduction

1. Highlighting Morocco as a case study, this information report forms part of the follow-up to Resolution 2577 (2024) and Recommendation 2286 (2024) "Guaranteeing the human right to food" of the Parliamentary Assembly. Drawing in particular on the work of the Food and Agriculture Organization of the United Nations (FAO), the Assembly promotes the need for a human rights-based approach to food security, viewing the right to food as fundamental and recognising that food must be available, accessible, sustainable and adequate.

2. This approach aligns with the definition of food security adopted at the 1996 World Food Summit, based on four complementary dimensions: food availability, physical and economic access to food, adequate nutritional utilisation of food, and the stability of these various dimensions over time. From this perspective, food security cannot be reduced solely to production volumes or trade balances. In its sense of "food resilience", it also implies the diversification of production systems, the reduction of strategic dependencies, sustainable management of natural resources, as well as food governance based on individual rights, the preservation of biodiversity, the protection of ecosystems, and long-term environmental sustainability.

3. In this context, Morocco offers a particularly interesting case study. Located at the crossroads of Europe, Africa, and the Arab world, the country occupies a strategic geopolitical and commercial position. As in many other countries, food security has emerged as a major strategic issue, with the agricultural and agri-food sector playing a central role. At the same time, Morocco is among the countries most exposed to the effects of climate change.

2. Challenges facing Morocco's food system

4. Morocco's food security depends on a complex balance between domestic agricultural production, reliance on grain imports, and the sustainable management of natural resources. Grains, and wheat in particular, play a central role in the diets of Moroccan households: bread is a staple of daily consumption, and soft wheat and barley crops alone account for more than 60% of the total area under grain cultivation.

5. Moroccan cereal production is highly dependent on rainfall. However, since the early 2000s, Morocco has been facing chronic water stress. Over the past sixty years, the amount of available water per person has fallen from over 2 500 cubic metres per year to between 500 and 700 cubic metres per person per year – a level well below the critical threshold of 1 000 m³ and close to the absolute scarcity threshold set at 500 m³.[2]

1. Reference to committee: Doc. 16365, Reference 4959 of 20 April 2026. Information report approved by the committee on 4 June 2026.
2. "Eau et climat: le Maroc à la croisée des chemins?", Moroccan Institute for Strategic Intelligence, Strategic Report, June 2025 (French only).

6. Precipitation has decreased by about 15% over the past fifty years, while the average temperature has risen by 1.5 degrees since the 1990s. Given that agriculture accounts for nearly 80% of water withdrawals, these changes have a direct impact on crop yields during periods of severe drought. Until the exceptional rains of the 2025-2026 winter, which yielded a record grain harvest of 9 million tonnes – nearly double that of dry years – Morocco had experienced seven consecutive years of drought, with grain crop yield losses reaching up to 30% in the most affected areas.[3]

7. These developments have significant social consequences. The agricultural sector accounts for nearly a quarter of national employment and more than 60% of rural employment. More than 130 000 agricultural jobs were lost in 2024 as a result of drought-related crop failures, contributing to a rise in national unemployment to 13.3% (which fell to 10.8% in the first quarter of 2026[4]). Rural women are particularly vulnerable to these changes.[5] They represent a significant portion of the agricultural workforce and often perform multiple roles: agricultural work, food processing, water collection, household maintenance, and participation in rural co-operatives. In several regions, water scarcity increases the time they spend on domestic water supply, reduces opportunities for agricultural production, and limits their income.[6]

8. This situation automatically increases Morocco's dependence on strategic imports. The country imports large quantities of soft wheat, maize, and certain agricultural inputs to meet domestic demand. Consequently, Morocco is highly exposed to fluctuations in global prices as well as to disruptions in international supply chains observed since the health crisis and the geopolitical shocks following the invasion of Ukraine and the wars in the Middle East.

9. In the face of these successive crises, public debates in Morocco have recently focused on the issue of Morocco's food self-sufficiency – that is, producing domestically what is consumed, reducing the country's dependence on global markets and ensuring social stability. While the economic benefits are not disputed, these debates have also highlighted the coexistence of dependence on imports for several staple food products for domestic consumption and the choice of a productivist agricultural model.[7] Morocco is, in fact, also an agricultural success story with a highly effective model in certain export sectors (see below).

10. Public debates are also fuelled by the sustainability aspect of the food system. In addition to pointing out the fact that the most competitive export crops are highly water-intensive in a context of structural water stress, in its opinion published in May 2026, the Economic, Social, and Environmental Council (ESEC) highlighted that agricultural intensification had increased pressure on already naturally fragile soils and contributed to their erosion, as well as on local varieties. Morocco has thus lost nearly 75% of its local cereal varieties due to the massive introduction of standardised imported crops that are heavy users of chemical inputs.[8]

11. From this perspective, the challenges facing Morocco's food system are multifaceted. They concern the sustainable management of water resources, climate adaptation in agriculture, the reduction of strategic dependencies, the balance between export agriculture and national food security, as well as the capacity of public policies to ensure sustainable and affordable access to food.

3. Responses of Moroccan agricultural policies

12. To address these challenges, Morocco has been undertaking an ambitious transformation of its agricultural model for the past two decades.[9]

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3. Global Information and Early Warning System (GIEWS), FAO, Morocco, 2 February 2026.
4. New Labor Force Survey (EMO2026) for the 1st quarter of 2026, Report by the High Commission for Planning (French only).
5. "Morocco's unemployment rate rises 13.3% in 2024 as drought hits farmers", Reuters, 3 February 2025.
6. "Resilience in Their Hands: Rural Women and Climate Adaptation in Morocco," Women's World Banking, 6 November 2025.
7. "Souveraineté alimentaire: le Maroc face au mirage de l'auto-suffisance", Maroc diplomatique, 24 April 2026 (French only).
8. "La biodiversité au Maroc: pour une gouvernance renouvelée au service d'un développement territorial durable" Economic, Social, and Environmental Council, Opinion, December 2025 (French only).
9. "Note on Agricultural Development Strategies and Efforts to Adapt to Climate Change" Ministry of Agriculture, Marine Fisheries, Rural Development, Water, and Forests.

3.1. Agricultural modernisation and sector specialisation

13. Launched in 2008, the Green Morocco Plan constituted the main structural reform of the Moroccan agricultural sector. Its ambition was based on a dual objective: to develop modern, competitive agriculture geared towards international markets, while fostering inclusive agriculture that supports small-scale producers.

14. The first objective has been achieved. Morocco can now boast a highly successful model in certain export sectors. Over the past two decades, it has established itself as a major player in agricultural exports: primarily tomatoes, citrus fruits, berries, processed seafood, watermelons and melons, olives, olive oil, and avocados. The European Union, with which Morocco signed an association agreement in 1996 – which was expanded in 2012 with agricultural liberalisation agreements – now absorbs the bulk of these agri-food exports.

15. This trade liberalisation has been accompanied by significant investments in packing facilities, logistics infrastructure, ports such as Tangier Med and modern irrigation technologies. The National Agricultural Investment Plan, mobilising approximately 15 billion dirhams (about 1.4 billion euros) between 2010 and 2025, has funded nearly 200 projects designed to support agricultural innovation.

16. While the Green Morocco Plan has also facilitated the organisation of smallholder farmers through cooperatives and producer groups, the solidarity-based dimension originally intended has been achieved primarily through the Generation Green 2020-2030 strategy (see below).

17. The redistributive effects of the policies implemented since 2008 are nevertheless controversial, as productivity gains and investments have been concentrated in large irrigated farms and high-value-added sectors. That said, in a country where the labour force participation rate is deemed insufficient by international financial institutions,[10] supporting these strategic choices is necessary as it helps sustain employment. The agricultural sector accounts for approximately 12% of the national GDP, 19% of exports, and is a key pillar of employment, providing 26% of national jobs and over 62% of rural jobs.[11]

3.2. Water management

18. The issue of water is central to Moroccan agricultural policies. One of the main levers deployed has been the massive expansion of localised “drip” irrigation, which delivers water directly to the base of plants in measured quantities. The area equipped with drip irrigation has more than quadrupled, rising from approximately 128 000 hectares in 2008 to over 540 000 hectares today.

19. Moroccan authorities estimate that this technology enables water savings of 30% to 60%, depending on the crops and regions. Experiments conducted in the Tadla, Marrakech and Agadir regions also show significant energy savings thanks to low-pressure systems. The National Program for Drinking Water Supply and Irrigation (PNAEPI) is continuing this momentum by aiming to equip one million hectares by 2030.[12]

20. However, the actual effects of drip irrigation on overall water consumption are controversial. This technology does improve irrigation efficiency at the plot level, allowing for greater production with less water. Conversely, the savings achieved do not always translate into reduced water withdrawals at the watershed level. In several regions, these savings have been used to expand irrigated areas or develop more intensive and profitable crops, such as berries or watermelons, thereby increasing agricultural production rather than reducing pressure on water resources. This rebound effect illustrates the limitations of an approach that relies too exclusively on technological innovation without comprehensive regulation of water use.[13]

21. At the same time, Morocco is investing in large-scale water infrastructure designed to secure water supply in the face of intensifying water stress: dams, interconnections between water basins, reuse of treated wastewater and desalination plants. These policies are primarily based on securing the water supply to sustain agricultural and economic activities.[14]

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10. “Morocco – Scaling the Atlas: Growth and Jobs for a Prosperous Morocco,” World Bank, April 2026.
11. “Note on Agricultural Development Strategies and Climate Change Adaptation Efforts”, Ministry of Agriculture, Marine Fisheries, Rural Development, Water, and Forests.
12. National Program for Drinking Water Supply and Irrigation (PNAEPI, 2020–2027) and 30-Year National Water Plan (PNE, 2020–2050), supported by the World Bank.
13. “Le mythe du goutte-à-goutte a fait long feu au Maroc”, Maroc Hebdo, 2 January 2026 (French only).
14. “Note on Irrigation Efforts to Strengthen Food Security”, Ministry of Agriculture, Marine Fisheries, Rural Development, Water, and Forests.

22. At the same time, other programs advocate a more territorial and ecosystem-based approach to water management. The OASIL project, technically led by the FAO, aims to revitalise the oasis agroecosystems of the Drâa-Tafilalet region, preserve their water balances and strengthen the resilience of local populations in the face of climate change.[15]

23. This coexistence of approaches reflects Morocco's commitment to reconciling technological modernisation, water security and environmental sustainability within the framework of the 2020–2050 National Water Plan. The country, now widely praised for its long-term vision in addressing the challenges of water stress and climate change has, in fact, made significant investments. Among the major priorities is the massive expansion of seawater desalination, with the goal of meeting nearly 60% of the country's drinking water needs by 2030 through this unconventional resource. This strategy aims to strengthen regional solidarity: supplying coastal cities with desalinated water will free up conventional resources for rural areas and agricultural development. The Chtouka desalination plant is one of the flagship projects of this strategy in a region particularly affected by the overexploitation of groundwater. In this regard, the World Bank's analysis, particularly in its recent report "Feed and Prosper", aligns with Morocco's approach by emphasising that future gains in agricultural productivity in water-stressed countries will depend on improving water use efficiency, modernising irrigation systems, reusing non-conventional water sources, and implementing integrated water resource governance. The report also highlights the need to integrate technological innovation, ecosystem conservation and water use regulation to ensure the long-term sustainability of water policies.[16]

3.3. Social inclusion, cooperatives, and territorial development

24. Launched in 2020 as a continuation of the Green Morocco Plan, the Generation Green strategy marks a new phase in Moroccan agricultural policy by placing greater emphasis on human capital, rural employment and social inclusion at the heart of public priorities. Agricultural co-operatives play a central role in this context. They enable small-scale producers to pool their means of production, improve their access to markets and strengthen their bargaining power. They also serve as spaces for training, learning and professional development.

25. The stated goal is to foster the emergence of an agricultural middle class, strengthen entrepreneurship among rural youth and promote greater economic integration of women in agricultural regions. As the director of the Agency for Agricultural Development (ADA) emphasised, women and young people are at the centre of the initiatives supported by the Generation Green strategy, with specific indicators for monitoring and support.[17]

26. The development of local products is a key driver of the strategy. The ADA has thus supported more than 530 producer groups in improving the packaging, processing and marketing of their products, and more than 380 groups have obtained the collective "Terroir du Maroc" label. A national digital platform dedicated to the marketing of local products has also been developed to facilitate co-operatives' access to national and international markets.[18]

27. Between 2021 and 2026, more than 3.6 billion dirhams (330 to 335 million euros) were invested in solidarity-based agriculture programmes, supporting hundreds of co-operatives of young farmers and rural women. Women's co-operatives producing argan oil, saffron, or aromatic plants are often the most visible examples of this trend, alongside date co-operatives in the oases of Drâa-Tafilalet, groups of prickly pear producers in arid areas and co-operatives specialising in honey, medicinal plants, and goat products in mountainous regions.[19]

3.4. The emergence of an agroecological transition

28. Although Morocco does not yet have a national-level agroecological strategy, Moroccan agricultural policies are gradually incorporating the principles of agroecology. In light of the findings highlighted by the CESE (see above) and a growing awareness of the environmental limits of the intensive model, agroecology is increasingly seen as a solution for the future that can improve soil quality and reduce production costs for

15. "Revitalizing the oases of Drâa-Tafilalet: preserving life and heritage" FAO, 15 August 2025.
16. "Nourish and Flourish: Water Solutions to Feed 10 Billion People on a Livable Planet. Global Water Monitoring Report" World Bank, 2026.
17. "Note on Solidarity-Based Agriculture and Local Products", Agricultural Development Agency.
18. https://terroirdumaroc.gov.ma/.
19. "Note on Solidarity-Based Agriculture and Local Products", Agricultural Development Agency.

small farmers through more sustainable practices: the development of soil conservation techniques, direct seeding, reducing chemical inputs, composting, mulching, crop diversification, preserving soil fertility, planting species considered more resilient to water stress (olive, almond, carob, or cactus), etc.

29. These initiatives are part of the solidarity-based agriculture programs under the Generation Green strategy. According to data from the Ministry of Agriculture, Marine Fisheries, Rural Development, Water and Forests, more than 109 000 hectares are expected to be planted between 2021 and 2026 with species adapted to arid and semi-arid conditions.[20] While these programs do not always fall under the strict definition of agroecology, they nevertheless reflect a growing desire to diversify production systems and better adapt to climate constraints.

30. In the same vein, the World Bank has been supporting several agricultural diversification and sustainable water management programs since 2017, aimed at strengthening the resilience of farms to droughts. According to its institutional reports, these programs have facilitated the conversion of approximately 300 000 hectares to crops considered more resilient, as well as the training of nearly 50 000 farmers in so-called “climate-smart” practices in regions most exposed to water stress, notably Souss-Massa, Drâa-Tafilalet and certain cereal-growing areas in the centre of the country. However, these approaches remain closer to a logic of climate adaptation and water efficiency than to a genuine agroecological transformation of agricultural systems.

31. The more explicit integration of agroecology into public policy is a recent development. In December 2025, as part of the Generation Green strategy, six partnership agreements were signed in Rabat between the ADA and a consortium of non-governmental organisations, with support from the European Union and the French Development Agency, to help small farms adopt agroecological practices.[21] This program, “Revitalisation of Moroccan Rural Areas through Employment and Entrepreneurship in the Agricultural and Para-Agricultural Sectors” (IHYAE) aims to convert 8 000 hectares to agroecological practices in the regions of Fez-Meknes, Oriental and Souss-Massa, improve the economic performance of 2 700 family farms and support the marketing of agroecological products. The program also emphasises the economic integration of rural youth and the empowerment of women in vulnerable agricultural areas.

32. The development of networks such as the Network of Agroecological Initiatives in Morocco (RIAM) also contributes to the dissemination of knowledge, the training of farmers and the emergence of an agricultural civil society mobilised around the challenges of ecological transition.[22]

4. Towards a more systemic and comprehensive approach to food security

33. Responses to Morocco’s food challenges cannot ignore governance issues.

34. Regarding water management, for several years now, the FAO and the World Bank have emphasised the need for more integrated and participatory management of water resources in arid regions. These institutions stress the importance of involving local communities, farmers, and water users in the governance of natural resources to improve the resilience of regions to climate change.[23]

35. In several rural regions of Morocco, for example, water management continues to rely on traditional community-based practices. In certain oases in southern Morocco, user associations still participate in the distribution of irrigation water according to collective rules inherited from traditional practices.[24] In its aforementioned report, the ESEC also emphasises the importance of preserving this local knowledge in a context of dwindling water resources.

36. The issue of food waste is also emerging as a growing food security challenge. According to the United Nations Environment Programme (UNEP), nearly 100 kg of food per capita is wasted each year in Morocco, amounting to approximately 3.3 million tonnes of discarded food products, including imported goods. Several

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20. “No. 85: Sur la piste des transitions agroécologiques. Quels chemins parcourus?”, Inter-réseaux Développement Rural, 7 March 2024 (French only).
21. “Transition agroécologique: signature à Rabat de six conventions de partenariat pour accompagner les petites exploitations agricoles” Maroc.ma, 12 December 2025 (french only).
22. https://reseauriam.ma/.
23. “Nourish and Flourish: Water Solutions to Feed 10 Billion People on a Livable Planet”, World Bank, Global Water Monitoring Report, 18 March 2026. Water and Land, FAO.
24. Mustapha Jaad, “La gestion de l’eau agricole par les Associations d’Usagers de l’Eau Agricole (AUEA) et les questions de développement durable: Cas de l’oasis de Mezguita au Maroc”, Research Papers in Economics and Management, Issue No. 5: June 2016 (French only).

civil society initiatives aim to reduce this food waste. The Moroccan association Zero Zbel, for example, has conducted awareness campaigns on bread waste and reducing food waste in urban households. Some local initiatives, though still very limited, are also developing systems for redistributing unsold food or recycling organic waste through composting.

37. At the regional level, Morocco is seeking to strengthen Euro-Mediterranean regional partnerships and position itself as a leading regional player in the fields of agriculture, water management and climate adaptation in Africa. At the 2025 United Nations Food Systems Summit, the country thus advocated for the creation of an international fund dedicated to African food security and highlighted South-South co-operation initiatives in the agricultural sector.[25] In this context, a Euro-Mediterranean institution, such as the Council of Europe's North-South Centre, could contribute to the discussions and emphasise the importance of inclusive governance and strengthened regional co-operation in addressing shared climate, social and food challenges.

38. Finally, in line with the human rights-based approach set out in Resolution 2577 (2024) and Recommendation 2286 (2024) "Guaranteeing the human right to food", there are also several avenues for consideration regarding the strengthening of the legal framework for food security. States are notably encouraged to enshrine the right to food in their national legislation, or even in their constitutional texts. In this regard, the FAO has recognised expertise and legislative support tools to help States develop legal frameworks tailored to food security challenges.

39. While the 2011 Moroccan Constitution does not recognise a right to food, its preamble and Article 19 reaffirm the Kingdom's commitment to the international conventions it has ratified regarding civil, political, economic, social, cultural, and environmental rights. Morocco is a party to the International Covenant on Economic, Social and Cultural Rights, Article 31 of which recognises the right to access water and a healthy environment. In this context, explicit recognition of the right to food at the national level could strengthen the coherence of Moroccan food policies regarding agricultural, social, environmental and health issues.

5. Conclusion

40. Ultimately, the Moroccan experience illustrates both the growing vulnerabilities facing food systems in arid regions and the capacity of public policies to experiment with multiple responses to these challenges. Faced with structural water stress, intensifying climate change and heavy dependence on international markets for certain strategic products, Morocco has undertaken a profound transformation of its agriculture over the past two decades, combining sector modernisation, water investments, support for rural areas and the gradual emergence of more sustainable approaches. While these policies remain fraught with tensions – between productivity and sustainability, exports and national food security, technological innovation and the preservation of natural resources – they nonetheless demonstrate a genuine commitment to adaptation and foresight.

41. The Moroccan case thus demonstrates that food security cannot be considered solely from the perspective of agricultural production but must be addressed from a more systemic perspective that integrates sustainable water management, social justice, climate resilience, territorial governance and human rights. Through its strategic position between Europe, Africa and the Arab world, as well as through the initiatives it is developing in the areas of sustainable agriculture, South-South co-operation and climate adaptation, Morocco now stands as a particularly instructive laboratory for food system transitions in the Mediterranean and Africa. As such, its experience can usefully inform the deliberations of the Council of Europe and Euro-Mediterranean institutions on the conditions for more resilient, inclusive and sustainable food security.

25. "Le Maroc appelle à créer un Fonds international pour la sécurité alimentaire en Afrique", Hespress, 29 July 2025 (French only).