Luxembourg, 20 November 2017

Environmental and Social Data Sheet

Overview

Project Name:	Portugal Irrigation Plan
Project Number:	2017-0339
Country:	Portugal
Project Description:	Irrigation investments under the Portugal irrigation programme, including modernization and rehabilitation works.
EIA required:	Multi-scheme investment; EIA is required for scheme sub-investments
Project included in Carbon Footprint Exercise[1]:	yes

Environmental and Social Assessment

Environmental Assessment

The project is structured as a framework loan to the Government of Portugal and will include a series of sub-projects that will be selected based on a public call for proposal procedure guided by a series of pre-established conditions mirroring the procedures already established for the distribution of the EAFRD funds under the RDP2020 for Portugal.

Each sub-project will comprise one or a group of the following interventions: (i) expansion; (ii) rehabilitation and (iii) modernization of a number of existing irrigated areas, as well as (iv) strengthening the pumping capacity; for a total of approximately 111,500 hectares in the four regions of mainland Portugal. Selected sub-projects will be grouped and formalised under a National Irrigation Programme of Portugal (PNR2020).

The PNR2020 aims, among others, at fostering economic development in rural areas and increasing resilience to the effects of climate change. The majority of the proposed sub-projects, particularly the expansion of irrigated areas and pumping capacity reinforcement, are located in the Alentejo region and will be served by the Alqueva general water system.

EIA procedures will be applied in accordance with EU regulations as transposed into the national law. The overall assessment for each of the selected sub-projects will be determined accordingly. Sub-projects involving extension of irrigation schemes will fall under Annex II of the EIA Directive (2011/92/EU) and be subject to an environmental screening decision by the Portuguese Environment Agency (APA) for the infrastructure work and Coordination and Regional Development Commission (CCDR) for the irrigation networks. CCDR is a decentralized agency of the national government endowed with financial and administrative autonomy, in the above mentioned regions.

The general programme management will be attributed to a PIU within the Institute for the Financing of Agriculture and Fisheries (IFAP) depending from the Ministry of Agriculture. The PIU will be created with similar procedures and personnel seconded from the managing authority in charge of the RDP2020 (Rural Development Program 2020). This means that

[1] Only projects that meet the scope of the Pilot Exercise, as defined in the EIB draft Carbon Footprint Methodologies, are included, provided estimated emissions exceed the methodology thresholds: above 100,000 tons CO_2e/year absolute (gross) or 20,000 tons CO_2e/year relative (net) – both increases and savings.

procedures covering project management - including the social and environment assessment and monitoring - will benefit from the procedures already established for the distribution of the EAFRD funds under the RDP2020 for Portugal that are operational and proven since several years.

The capacity of both the Promoter and the environmental authorities competent for the assessment of the environmental impact of the projects is deemed good.

Only subprojects, related to irrigation schemes earmarked within the eight river basin management plans (RBMPs) for 2016-2021 and fulfilling sustainability criteria established for irrigation investments in the EAFRD Regulation will be eligible/considered for financing under this framework.

A large proportion of the project is considered to support Climate Action through mitigation or adaptation.

EIB Carbon Footprint Exercise

The estimated emissions savings are estimated at 52,500 tonnes of CO_2-equivalent per year.

The assumption is that, even if not directly included in the project's boundary the projects has substantial impact on the downstream farming activities in the project development areas (PDA). In the PDA all the land was already dedicated to agriculture before the investment, hence the high level of category 3 emission in the "without project" scenario which are mainly due to diesel consumed by the farm machinery and, to a less extent, the use of N fertilizers.

The project will bring about substantial cropping patterns changes from rainfed areas with traditional rotational crops to irrigated areas cultivated with perennial crops, mainly olives and vine. This will have a positive impact on the carbon pools in the soil due to reduced tillage and CO_2 fixation in the root and wood systems. At the same time, this explains also the relative modest increase in diesel consumption for farm machinery as these crops require less frequent and less energy intense machinery intervention. Part of the new power demand to pump irrigation water will be supplied by renewable energy units, mainly solar, that will be built in proximity of the pumping units with the exclusive purpose of substituting the expense and the GHG footprint of power purchased from the grid.

For the annual accounting purposes of the EIB Carbon Footprint, the project emissions will be prorated according to the EIB lending amount signed in that year, as a proportion of project cost.

Social Assessment, where applicable

During the appraisal visit, it was ascertained that farmers and their water users associations (WUAs) are in favour of the investments included in the draft PNR2020, seeing the opportunity for having adequate and trustable irrigation water source and the adoption of state-of-the-art on demand water supply systems.

The preparation and selection of sub-projects will require an open consultation and decision-making process that will enable farmers to make an informed decision about engaging in sub-projects. During the project implementation, although permanent physical resettlement of populations located alongside the infrastructure is not expected, some degree of temporary or permanent economic displacement due to the installation works (e.g. laying pipes, canals, etc.) and new infrastructure (e.g. filters) cannot be excluded.

The Promoter will undertake to implement these procedures following the standards of the EU E&S and country regulations.

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Public Consultation and Stakeholder Engagement

Besides the consultations and decision making process concerning the beneficiary farming community described above, further public consultation and stakeholder engagement events may be legally required through the Environmental Impact Assessment procedure required for individual sub-projects. The overall assessment and permitting needs for each of the selected sub-projects will be determined according to relevant EU regulations.

Other Environmental and Social Aspects

The project is expected to lead to the creation of additional direct job opportunities equivalent to 6,492 FTE in the project development area during the operation of the project.

Conclusions and Recommendations

With the contractually binding safeguards mentioned in this document in place, the proposed framework project has the conditions to be implemented according to EU E&S standards and the operation is therefore considered acceptable for EIB finance from the social and environmental point of view.

Undertaking Conditions:

- Performing environmental impact assessment in an intensity required by the Portuguese and EU environmental protection and water acquis.
- Within a maximum of 2 years form the signature of the finance contract, aligning the water tariffs for agriculture to the Water Framework Directive (WFD) provisions in order to commensurate these tariff to CAPEX and OPEX cost recovery, as a key sustainability factor for the project and sector (PNR2020 and beyond).
- Priority will be given to 1) sub-projects that are replacing unsustainable groundwater sources usage with surface water or 2) replace unsustainable local surface water sources by more sustainable; to 3) to sub-projects using renewable source of energy and/or on-site production.
- Sub-projects design should aim at incorporating best available techniques to maximise potential water savings and/or water efficiency gain in agriculture on a best effort basis.
- Sub-projects must comply with the criteria set out in the EAFRD regulation 1305/2013 EU for irrigation projects (preamble [35] and article 46).
- Expansion of irrigated areas should only include areas designated as agricultural land and where the status of the affected water body has not been identified as less than good in the relevant river basin management plan for reasons related to water quantity. .
- High levels of formal adherence by the population affected by the projects (including, but not restricted to beneficiary farmers in the project development area) ascertained in public consultation processes such as those carried out under an ESIA procedure or a generally assembly of affected WUA.