

Thematic Reference Indicators (TRIs)	
AFS_TRI_5 Water efficient and sustainable irrigation systems	
Number of smallholder farmers, who apply water efficient and sustainable irrigation systems	
Contribution to sub-objective of M21-24	<i>Sub-objective 4: Ensuring the sustainable management of natural resources</i>
Contribution to 2030 Agenda: SDG target	<u>SDG target 6.4</u> : By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity
Definition (description, specification, qualification)	<p>Smallholder farmers: Farm holders with a land area < 5ha in Asia and Africa and < 10 ha in Latin America</p> <p>Water efficiency: Water efficiency is reducing water wastage by measuring the amount of water required for a particular purpose and the amount of water used or delivered.</p> <p>Sustainable irrigation systems = Integrated Water Resource Management (IWRM): IWRM is a systematic process for the sustainable development, allocation and monitoring of the use of water resources in the context of social, economic and environmental objectives. It works from the principle that many different uses of finite water resources are interdependent, e.g., if a great deal of water is used by irrigation, less water will be available for drinking water.</p> <p>The three pillars of IWRM are:</p> <ol style="list-style-type: none"> 1. An enabling environment of suitable policies, strategies and legislation for sustainable water resources development and management; 2. Putting into place the institutional framework through which to put into practice the policies, strategies and legislation; 3. Setting up the management instruments required by these institutions to do their job. <p>The IWRM key principles are:</p> <ol style="list-style-type: none"> a. water should be treated as an economic, social and environmental good; b. water policies should focus on both the management of water (demand) and the provision of water (supply); c. government regulatory frameworks are critical in fostering the sustainable development of water resources; d. water resources should be managed at the lowest appropriate level (i.e., in communities and villages as opposed to in capitals). <p>You are encouraged to provide also information on the total irrigated area (in hectares) efficiently and sustainably managed (in the comments field or as a separate indicator).</p>
Measuring unit	a) Number of smallholder farmers
Disaggregation dimension (sex, age group, ethnicity or other identity criteria of LNOB)	<ul style="list-style-type: none"> • Gender • One targeted left behind/vulnerable population group (to be prioritised according to the context)
Data source	At project level, implementing partners
Rationale	<p><u>Theory of change</u></p> <p>If direct beneficiaries apply water efficient and sustainable irrigation systems successfully, then they are able to prolong the agricultural season and produce more, thus get more income, while preserving water levels in related water bodies and ground water tables, respectively,</p> <p>because they may plant and harvest also in drier seasons without rainfall.</p>

Possible messages of aggregation, synthesis and contribution	Xx persons use irrigation systems on yy hectares to produce crops during a prolonged season in a water efficient and sustainably irrigated way that keeps water tables/levels at the same level.
Thematic responsibility	Agriculture and Food Security Network