Sector	WATER RESOURCES
Subsector	Domestic water supply
Technology name	**Wells for Domestic Water Supply** [i]
Scale	Small
Availability	Short Term, Medium Term and Long Term
Technology to be included in prioritisation	- Assessing technologies through multi criteria analysis (based on TNA team assumption through assessment criteria, and TNA Tool).
Background/notes	- Constructing, repairing and maintaining all types of existing wells; provide ponds; and produce jumbo cement water jars in order to provide safe drinking water and water for household use (NSDP update 2009-2013); - The RGC's Strategic Framework for Decentralization and Deconcentration Reform promotes a transfer of responsibilities and resources to sub-national and local levels; - The Strategy includes promoting improved farm water management through water harvesting/storage (MAFF and MoWRAM, 2007).
Implementation assumptions	- National Water Resources Policy, several laws and sub-decrees recently approved in the agriculture and water sector; - Accessibility to safe-drinking water and sanitation in particular in rural communities residing in water-scarce areas; - Small scale technologies implementation through programs which are applied at sub national or community level as well as at household level; - These technologies apply at the household or community level are considered small scale technologies; - Short term technologies have been applied commercially with proven reliability in a comparable market context.
Impact Statements (how this option impacts the country development priorities)	
Country social development priorities	- Cambodia has identified development priorities as part of NAPAs, NSDP Update 2009-2013, Poverty Reduction Strategy, Policies, National Communications (INC and SNC) to the UNFCCC; - The capacity of water reservoirs has expanded and the ability to provide water for cultivation has increased; - The Royal Government has established water user communities with increasing participation from farmers.
Country development priorities	- Establishing and supporting farmer development community, Farmer Water User Communities, assisting farmers to establish agriculture cooperatives and other organizations to market of agricultural products and purchase inputs.

Country environmental development priorities	- Protecting water resources from pollution and degradation so that they continue to be available for human consumption, fisheries, ecosystem maintenance, etc.
Other consideration and priorities such as market potential	- The technology is small-scale, proven and less capital-intensive. It has market potential nationwide.
Costs (US$)	
Capital costs over 10 years	- Costs are dependent on the type of technology to be used (open wells, semi-open wells, bore wells), and the depth of the water table. An initial investment cost of about US $1000 per well is required. Open wells are expected to last 20 years with minimum maintenance other than removing sediments during the dry season.
Operational costs over 10 years	- Bore wells with hand pumps are the least costly but require spare parts and regular maintenance, whilst open wells can be maintained by local communities at lower cost.
Other costs over 10 years	N/a

[i] **This fact sheet has been extracted from TNA Report – Kingdom of Cambodia - Technology needs assessment and technology action plans for climate change adaptation. You can access the complete report from the TNA project website http://tech-action.org/**