

Indicators by Development Strategic Objective

Financial Assistance Projects /Indicator Reference (Information and Communication Technology)

Note: Those written in blue are Global Sustainable Development Goal (SDG) Indicators. In light of recent global trends, relevant Global SDG indicators are listed for project officers who may wish to refer to these indicators when formulating a project plan (setting indicators).

Development strategic objectives (*1)	Mid-term objectives	Mid-term sub-targets	Types of infrastructure	Indicators / Global SDG Indicators, etc. (written in blue)		Policy and methods for setting indicators	Reference projects by infrastructure type		
							Country name	Project name	Evaluation year
2. Development of ICT human resources (*)	2-1. Professional development of ICT engineers	2-1-1. Support for content creation	Development of content and applications	Effect indicators	Basic indicators (1) Average amount of content released per Web developer per day (pages per Web developer per day) (2) Average number of daily visitors to the portals developed through the project (visitors per day per portal) Reference: Japanese Government's SDGs Implementation Guiding Principles Indicator: Number of projects made in consideration of SDGs Reference: JICA's 4th Medium-term Objective Indicator: Number of projects including or collaborating on operation and maintenance		Viet Nam	Rural Community Internet Use Development Project (ODA Loan)	2006
	2-3. Improvement in ICT literacy	2-3-3. Introduction of ICT to education system	Upgrading of IT-related education facilities / equipment (audio and video systems and distance learning equipment)	Operation indicators	Basic indicators (1) Number of training participants (2) Number of ICT training courses (courses per year) (3) Continuing education courses in ICT (hours per week) (4) Maximum number of countries simultaneously connected to a large classroom	Operation indicators (1) Compare the before and after of the project. (2) Count the number of courses made available by upgrading facilities and equipment. (3) Count the number of courses made available by upgrading facilities and equipment. (4) Set this indicator if the project is planned to install equipment for satellite or similar communications systems.	Fiji	Project for Construction of Information and Communication Technology Center at the University of the South Pacific (Phase II)	2009
				Effect indicators	Basic indicators (1) Number of bachelor's degree recipients in ICT Supplementary indicators (1) Satisfaction levels with the education environment Reference: Global SDG Indicator 4.4.1. Proportion of youth and adults with information and communications technology (ICT) skills, by type of skill Reference: Japanese Government's SDGs Implementation Guiding Principles Indicator: Number of projects made in consideration of SDGs Reference: JICA's 4th Medium-term Objective Indicator: Number of projects including or collaborating on operation and maintenance	Effect indicators: Basic indicator (1) Compare the before and after of the project. Effect indicators: Supplementary indicator (1) It is desirable to use a questionnaire for quantitative data collection.			
2. Development of ICT human resources (*)	2-3. Improvement in ICT literacy	2-3-3. Introduction of ICT to education system	Satellite connection systems, wireless and wired communication systems, antenna systems, etc.	Operation indicators	Basic indicators (1) Number of distance education participants (2) Number of available distance education programs (3) Number of distance education subjects	Operation indicators (1) Compare the before and after of the project. (2) Count the number of programs made available by upgrading facilities and equipment.	Fiji	The Project for Upgrade of USNet Communications System (Evaluated)	2006

						(3) Count the number of subjects covered in the programs made available by upgrading facilities and equipment.		by the Ministry of Foreign Affairs)	
				Effect indicators	<p>Basic indicators (1) School enrollment ratios in remote areas (outlying islands)</p> <p>Supplementary indicators (1) Satisfaction levels of distance education participants with their learning environment</p> <p>Reference: Global SDG Indicator 4.3.1. Participation rate of youth and adults in formal and non-formal education and training in the previous 12 months, by sex</p> <p>Reference: Japanese Government's SDGs Implementation Guiding Principles Indicator: Number of projects made in consideration of SDGs</p> <p>Reference: JICA's 4th Medium-term Objective Indicator: Number of projects including or collaborating on operation and maintenance</p>	<p>Effect indicators: Basic indicator (1) Compare the before and after of the project.</p> <p>Effect indicators: Supplementary indicator (1) It is desirable to use a questionnaire for quantitative data collection.</p>			
3. Development of ICT infrastructure	3-1. Development of ICT infrastructure	3-1-1. Development of backbone networks	Development of international telephone switching systems	Operation indicators	<p>Basic indicators (1) Establishment of international telephone connections from all fixed lines and mobile phones</p> <p>Supplementary indicators (1) Network traffic (international) (2) Call completion rate (percent)</p>	<p>Network traffic = number of calls x average call duration</p> <p>International network traffic: network traffic from a given country to another country and vice versa</p> <p>Note that it is extremely difficult to collect data on network traffic and call completion rates in countries eligible for grant aid.</p> <p>Call completion rate: ratio of connected calls (n) to call attempts (N) (n/N)</p>	Laos	The Project for Improvement of International Telephone Switching System (Evaluated by the Ministry of Foreign Affairs)	2008
				Effect indicators	<p>Basic indicators (1) Reduction in telecommunication relay service fees paid to intermediate countries (2) Waiting list for main lines</p> <p>Reference: Japanese Government's SDGs Implementation Guiding Principles Indicator: Number of projects made in consideration of SDGs</p> <p>Reference: JICA's 4th Medium-term Objective Indicator: Number of projects including or collaborating on operation and maintenance</p>	<p>Reduction in telecommunication relay service fees paid to intermediate countries: reduction in telecommunication relay service fees paid to service providers in intermediate countries as a result of the development of international telephone switching systems to make direct international calls.</p> <p>Waiting list for main lines: Number of unmet applications for connection to the public switched telephone network</p>			

3. Development of ICT infrastructure	3-1. Development of ICT infrastructure	3-1-2. Development of broadband access networks	Laying of optical fiber cables, etc. (including development of wireless and mobile networks)	Operation indicators	Basic indicators (1) Data transmission capacity (bytes) Supplementary indicators (1) Internet traffic				
				Effect indicators	Supplementary indicators (1) Number of Internet subscribers (2) Internet subscription rate (percent) (3) Data transmission speed (gigabits per second / megabits per second) (4) Mobile broadband subscription rate Reference: Global SDG Indicator 9.c.1. Proportion of population covered by a mobile network, by technology Global SDG Indicator 17.6.2. Fixed Internet broadband subscriptions per 100 inhabitants, by speed Global SDG Indicator 17.8.1. Proportion of individuals using the Internet Reference: Japanese Government's SDGs Implementation Guiding Principles Indicator: Number of projects made in consideration of SDGs Reference: JICA's 4th Medium-term Objective Indicator: Number of projects including or collaborating on operation and maintenance	Internet subscription rate: number of Internet subscribers / total population Mobile broadband subscription rate: strongly emphasized by International Telecommunication Union (ITU) and other international organizations and often used in academic literature to describe the digitalization level of a developing country.	Cambodia	Greater Mekong Telecommunication Backbone Network Project (ODA Loan)	2004
							Viet Nam	Rural Community Internet Use Development Project (ODA Loan)	2006

(*) Development Strategic Objectives 1 (improvement of ICT policy-making capacity) and 4 (promotion of use and application of ICT) are omitted because they are not associated with any financial assistance projects. Other irrelevant mid-term objectives and sub-targets are also omitted.