

11. Standard indicator reference and typical lessons learned (Health)

Mid-term sub-targets corresponding to models in this reference

Model name	Corresponding mid-term sub-targets
Model (1) Maternal, neonatal and child health (Enhancing capacity of the central administration)	1-1-1 Enhancing capacity of the central administration
Model (2) Maternal, neonatal and child health (Enhancing capacity of human resources for health)	1-1-4 Enhancing capacity of human resources for health
Model (3) Maternal, neonatal and child health (Improving community (local resident's) awareness and strengthening its structure)	1-1-5 Improving community (local resident's) awareness and strengthening its structure
Model (4) Health systems (Improving service quality)	1-5 Improving service quality
Model (5) Health systems (Leadership and governance)	2-1 Health administration management
Model (6) Health systems (Strengthening human resources and educational systems for health)	4-1 Strengthening continuous education systems
Model (7) Health systems (Health information)	5-1 Information collection (Surveillance system) 5-2 Information analysis and utilization
Model (8) Health systems (Medical equipment, etc.)	6-1 Quality control 6-2 Stable procurement 6-6 Facility and equipment maintenance

Model names and corresponding mid-term sub-targets for the health systems are excerpted from “Items that tend to become an issue in health systems strengthening” on page 16 of “Health systems strengthening” in Japanese (Documents for Operation). (The Documents for Operation can be obtained from the Human Development Department.)

**JICA standard indicator reference and typical lessons learned in technical cooperation projects (Health)
Model (1) “Maternal, neonatal and child health (Enhancing capacity of the central administration)”**

Development strategic objective	Mid-term objective	Indicators at a program goal level	Mid-term sub-target	Overall goals/Project purposes and indicator examples	Methods/Policies for setting indicators	Typical lessons learned	Example of project purpose (image of projects)	Reference projects
Development strategic objective	Development thematic issue level to which the cooperation program corresponds	Connection with the target years or indicators in sector/regional development plans by the recipient country’s government	Level of thematic issue to solve in individual projects	To . . . (outcome) By/through . . . (output) Thereby contributing to (impact) Indicator examples	Ways of thinking, points to remember, and important points in setting indicators	Write in lessons and risks to be necessarily used or reflected in implementing projects corresponding to the “mid-term sub-targets” from the perspectives of: 1) planning stages, and 2) management.	Examples of project purpose	Project information with good practices to refer to
Improvement of the maternal, neonatal and child health state	1-1 Introduction and expansion of quality maternal, neonatal and child health services		1-1-1 Enhancing capacity of the central administration	<p>(Proposed model description) To develop/consolidate the national strategy, operational plan, budget, service standards, and other tools related to maternal, neonatal and child health, (Outcome) By strengthening the capacity of staff at the Ministry of Health for project planning and service standardization related to maternal, neonatal and child health, (Output) Thereby contributing to improving the capacity of the Ministry of Health for administration and project operation/management related to maternal, neonatal and child health. (Impact) (Standard indicator examples) 1.Indicator examples of overall goal (Basic) (1) By the year xx, yy% of the operational plans are implemented. (2) Maternal, neonatal and child health service standards are issued, implemented, and/or updated.</p>	Note for (1): Specify ways and methods for measuring the implementation of the plans.	<p>With regard to the technical guidelines to be developed and revised through cooperation with the recipient country, it is important to respect discussions of the Technical Working Group on Maternal, Neonatal and Child Health (the name will vary depending on the country) and other approval processes of the recipient country, and to support the development and revision of the guidelines so that the positioning and prospects for adoption of the guidelines can be clarified within the government.</p> <p>Considering the size of the areas subject to cooperation and the expected spread of the cooperation effect, support and cooperation from the early planning stage are particularly important. In addition, as there are cases where the project will not be implemented even when there are detailed documents, it is necessary to involve the department responsible for the project implementation, and depending on the situation, to have a structure (or to collaborate with other projects or donors) to support the implementation and realization of the policies.</p> <p>As there are countries where both the central and local administrative capacities are weak, it may be desirable to work on enhancing not only the central administrative capacity but also the local administrative capacity.</p> <p>In any case, an analysis should be made at the time of cooperation planning of how the local administrative organizations function since this is related to the fulfillment of the central government’s capacity. (From Thematic Guidelines on “Maternal, neonatal and child health”)</p>	<p>To improve the Reproductive Health (RH) administrative operation capacity of the Reproductive Health Department (RHD) and the Provincial Reproductive Health Officers (PRHO), By enhancing the M&E capacity of the RHD at the Ministry of Public Health and the PRHO at the provincial health office, and enhancing the capacity of the RHD and PRHO for the planning, operation, and evaluation of in-service training for those staff members engaged in the operation of RH services at organizations and health facilities under the supervision of the RHD and the PRHO, Thereby contributing to improving the quality of maternal, neonatal and child health services.</p> <p>To enhance the capacity of the Ministry of Health for the coordination of sector-wide projects through collaboration with health-related partners, By building and strengthening the project coordination mechanism for the entire health sector including maternal, neonatal and child health, introducing a unified monitoring framework for the entire health sector including maternal, neonatal and child health, sharing the development process of the five-year health sector development plan, and developing a maternal, neonatal and child health strategy through the Technical Working Group on Maternal, Neonatal and Child Health, Thereby contributing to the systematic implementation of all programs in the health sector under the leadership of the government of Laos and the single sector policy as well as harmonization with the</p>	<p>1. Reproductive Health Project in Afghanistan Phase 2 (Term of Cooperation: March 2010 - February 2015)</p> <p>46. Capacity Development for Sector-wide Coordination in Health in Laos (Term of Cooperation: July 2006 - June 2010)</p>

2. Indicator examples of project purposes (Basic)
 (1) Development or update of the national strategy (new development or update frequency: xx times/year)
 (2) Development of operational plans based on the national strategy (number of project plans: xx/year)
 (3) The number of maternal, neonatal and child health service standards becomes xx.
 (4) The number and types of maternal, neonatal and child health service standards becomes xx.

[Refer to the following two indicator lists for indicators at a global level:]
 Global Reference List of 100 Core Health Indicators (WHO 2015)
<http://www.who.int/healthinfo/indicators/2015/en/>
 SDG Targets and Indicators (also refer to Sheet 10)
<http://unstats.un.org/sdgs/indicators/indicators-list/>

Ministry of Health and health-related partners.

To improve the health state of women of reproductive age and neonates in the target district,
 By giving feedback on experiences and lessons learnt from the project to superior and related organizations, carrying out activities to obtain political support, improving the management of Health and Family Planning Offices in the target district, strengthening the system to provide safe delivery services in the target district and cities in the district, and enabling people in the target community to proactively utilize reproductive health services in cooperation with the private sector, Thereby contributing to the standardization of approaches to reproductive health services extracted from the project and applying these approaches to other districts.

47. Safe Motherhood Promotion Project in Bangladesh (Term of Cooperation: April 2006 - March 2010)

To systematically and effectively implement the seventh five-year health plan and sub-sector program strategy plan, according to the five-year plan based on the harmonization of project implementation procedures,
 By appropriately and effectively conducting sector working groups at policy and practical levels, and meetings between the secretariat and the coordination unit, solving problems clarified through monitoring the implementation of the seventh five-year health plan and sub-sector program, appropriately and effectively operating the technical working group on maternal, neonatal and child health and immunization, solving any problems clarified through monitoring the monitoring of the skilled midwife training plan and other maternal, neonatal and child health integration service strategy plans, appropriately and effectively operating the technical working group on human resources for health, solving any problems clarified through monitoring the implementation of the strategy for human resource development for health by 2020, appropriately and effectively operating the technical working group on systematic finance, and strengthening capacity for the development of an annual plan and

19. Capacity Development for Sector-wide Coordination in Health in Laos Phase 2 (Term of Cooperation: November 2010 - October 2015)

						<p>financial management so that the health financial strategy can be implemented efficiently and effectively by connecting internal and external funds with the project implementation, Thereby contributing to the continuous development of strategic plans, efficient project coordination, and the effective distribution of internal and external funds by the Ministry of Health, and securing capacity to steadily achieve the millennium development goal in the health sector in Laos.</p> <p>To expand the approaches to improve Maternal and Neonatal Health (MNH) service quality and utilization in line with Health, Population, and Nutrition Sector Development Program (HPNSDP) in Bangladesh, By strengthening coordination functions (at MNCH forum, etc.) for maternal and neonatal protection activities carried out by related stakeholders at national level, disseminating the implementation process and lessons of best practices in maternal, neonatal and child health improvements from the project and the results of the phase 1 project to the national level, and confirming the mechanism and structure of MNCH minimum package and approaches in Satkhira and Habiganj Districts which are integrated into the Upazila Health System (UHS) and implemented in cities in the districts, Thereby contributing to improving the maternal and neonatal health status in Bangladesh.</p>	<p>11. Safe Motherhood Promotion Project in Bangladesh Phase 2 (Term of Cooperation: July 2011 - June 2016)</p>
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JICA standard indicator reference and typical lessons learned in technical cooperation projects (Health)
Model (2) “Maternal, neonatal and child health (Enhancing capacity of human resources for health)”

Development strategic objective	Mid-term objective	Indicators at a program goal level	Mid-term sub-target	Overall goals/Project purposes and indicator examples	Methods/Policies for setting indicators	Typical lessons learned	Example of project purpose (image of projects)	Reference projects
Development strategic objective	Development thematic issue level to which the cooperation program corresponds	Connection with the target years or indicators in sector/regional development plans by the recipient country's government	Level of thematic issue to solve in individual projects	To . . . (outcome) By/through . . . (output) Thereby contributing to (impact) Indicator examples	Ways of thinking, points to remember, and important points in setting indicators	Write in lessons and risks to be necessarily used or reflected in implementing projects corresponding to the “mid-term sub-targets” from the perspectives of: 1) planning stages, and 2) management.	Examples of project purpose	Project information with good practices to refer to
Improvement of the maternal, neonatal and child health state	1-1 Introduction and expansion of quality maternal, neonatal and child health services		1-1-4 Enhancing capacity of human resources for health	<p>(Proposed model description) To appropriately implement training for the development of human resources for maternal, neonatal and child health (nurses and midwives), (Outcome) By improving the training structure (system and content) necessary for the continuous and basic education of human resources for maternal, neonatal and child health, (Output) Thereby contributing to the development of human resources for maternal, neonatal and child health who can provide quality services. (Impact)</p> <p>(Standard indicator examples) 1.Indicator examples of overall goal (Basic) (1) Quality of care by training participants (measured by a third party rating, etc.*) (2) The number of human resources for health in the target area (3) The number of health facilities satisfying the standards (admission</p>		<p>(1) With regard to continuous education, on-site services tend to be suspended if existing workers participate in the training. Therefore, for training that is newly or additionally carried out, the schedule for National Immunization Day (NID) and other important events, epidemic periods of infectious diseases, and the training schedules of other donors need be considered so as to reduce the impact on on-site services. In addition, securing financial resources for travel expenses and daily allowances for the training participants and mentors should be considered in advance as it will become an issue for continuing the training and instruction/supervision systems. (2) With regard to basic education, it should be noted that it is necessary to coordinate and build an ongoing relationship with not only the Ministry of Health but also the Ministry of Education and other related organizations because activities related to the overall education system, such as curriculum revision, etc., are expected to be carried out. In case of cooperation on the recruitment and allocation of personnel, there is a high possibility that advanced negotiation and coordination within the recipient country's government will be required because it is necessary to adequately involve the related organizations other than the Ministry of Health such as the National Personnel Authority and the Finance Authority, etc. (From Thematic Guidelines on “Maternal, neonatal and child health”)</p>	<p>To strengthen the health training system and provide uniform and quality services based on the CHIPU (Complex Hospital Institute Project University) concept, By developing and instituting a system which will be the basis for nursing education, enhancing the capacity of health training institutes to implement good personnel development programs, and strengthening the coordination mechanism between related organizations for the effective improvement of the health training system, Thereby contributing to the development of quality human resources for health, and contributing to improving maternal, neonatal and child health services.</p> <p>To improve the quality of continuous nursing education in the field of midwifery in the Santa Ana Department, By establishing and implementing the process and monitoring/evaluation methods for continuous nursing education training in the field of midwifery in the Santa Ana Department, improving the operation and management systems for continuous nursing education training in the field of midwifery in the Santa Ana Department, and promoting activities for self-sustaining</p>	<p>18. Project for Sustainable Development of Human Resource for Health to Improve Maternal, Neonatal and Child Health Services in Laos (Term of Cooperation: February 2012 - February 2016)</p> <p>48. The Project for Strengthening Nursing Education and In-service Training in El Salvador, Guatemala, Honduras, Nicaragua and the Dominican Republic (Term of Cooperation: August 2007 - August 2010)</p>

			<p>capacity) of the Ministry of Health in the target area</p> <p>2.Indicator examples of project purposes</p> <p>(1) Training instructors earn 3.5 or above on a 5-point scale when evaluated by training participants.</p> <p>(2) The number of training facilities which satisfy the training monitoring standards developed by the Ministry of Health becomes xx.</p> <p>(3) The number of training participants becomes xx (in the time period between xx and xx).</p> <p>(4) The number of implemented training courses becomes xx per yy (years, months, or weeks).</p>	<p>[Refer to the following two indicator lists for indicators at a global level:]</p> <p>Global Reference List of 100 Core Health Indicators (WHO 2015)</p> <p>http://www.who.int/healthinfo/indicators/2015/en/</p> <p>SDG Targets and Indicators (also refer to Sheet 10)</p> <p>http://unstats.un.org/sdgs/indicators/indicators-list/</p>	<p>development in the Santa Ana Department,</p> <p>Thereby contributing to improving the nursing services in the field of midwifery in the Santa Ana Department, Sonsonate Department, and Ahuachapan Department.</p> <p>To improve administrative systems and infrastructures for the development of nurses and midwives and strengthen nursing education systems,</p> <p>By integrating the administrative functions of clinical instruction and school education for nurses and midwives, establishing and implementing “Rules for nurses and midwives”, strengthening database management of information on nurses and midwives, creating feasible supply and demand plans (development and allocation plans) for nurses and midwives, establishing project monitoring and evaluation systems, effectively reflecting these systems in project management, enhancing the capacity of mentors for the development of nurses and midwives, improving (personnel and equipment) management systems at the model school, developing an education plan at the model school, and implementing education and practices based on the education plan, Thereby contributing to establishing a comprehensive system for the development and utilization of nurses and midwives.</p>	<p>49. Project for Human Resource Development of Nursing/Midwifery in Laos (Term of Cooperation: May 2005 - April 2010)</p>
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JICA standard indicator reference and typical lessons learned in technical cooperation projects (Health)
Model (3) Maternal, neonatal and child health (Improving community (local resident's) awareness and strengthening its structure)

Development strategic objective	Mid-term objective	Indicators at a program goal level	Mid-term sub-target	Overall goals/Project purposes and indicator examples	Methods/Policies for setting indicators	Typical lessons learned	Example of project purpose (image of projects)	Reference projects
Development strategic objective	Development thematic issue level to which the cooperation program corresponds	Connection with the target years or indicators in sector/regional development plans by the recipient country's government	Level of thematic issue to solve in individual projects	To . . . (outcome) By/through . . . (output) Thereby contributing to (impact) Indicator examples	Ways of thinking, points to remember, and important points in setting indicators	Write in lessons and risks to be necessarily used or reflected in implementing projects corresponding to the "mid-term sub-targets" from the perspectives of: 1) planning stages, and 2) management.	Examples of project purpose	Project information with good practices to refer to
Improvement of the maternal, neonatal and child health state	1-1 Introduction and expansion of quality maternal, neonatal and child health services	(1) Maternal mortality rate at national level (2) Infant and neonatal mortality rates at national level (3) Development rate of pregnancy complications at national level (4) Birth rate of low-weight babies at national level (5) Under-five mortality rate at national level	1-1-5 Improving community (local resident's) awareness and strengthening its structure	(Proposed model description) To improve the quality of maternal, neonatal and child health services, and increase service utilization by community members in the target area, (Outcome) By providing health education to community members in the target area, organizing the health committee, etc. at a community level, and strengthening the systems (Emergency Obstetric Care training for health staff, development of health volunteers, community emergency transportation system, etc.), (Output) Thereby contributing to improving maternal, neonatal and child health. (Impact) (Standard indicator examples) 1.Indicator examples of overall goal (1)* (Basic) (1) Maternal mortality ratio in the target area (2) Infant/neonatal mortality rate in the target area (3) Incidence rate of pregnancy complications in the target area (4) Incidence of low birth weight in the target area (5) Under-five mortality rate		Sufficient understanding of the social structure and cultural background of the target area is essential when working on local residents. It is effective to figure out feasible organizations for collaboration, determine priorities, and visualize the network using a diagram. The aim of awareness-raising in local residents and strengthening the community structure is not meant to cover administration by local residents or the responsibility of health staff but is rather meant to bring about appropriate demands for maternal, neonatal and child health services and to disseminate sustainable maternal, neonatal and child health services based on the actual situation. Therefore, it is important to involve the responsible departments of the relevant administrative and medical organizations. In particular, in case of a model project, it is desirable to consider the institutionalization of community activities and the development of those activities across the country by deeply involving the government. In this regard, it is often the case at a community level that the participation of not only the health administration but also other administrative bodies should be gained from a broad perspective, considering the connections between government and local residents. In any case, it should be sufficiently understood that using local residents as health volunteers will not fundamentally solve the shortage of health staff. (From Thematic Guidelines on "Maternal, neonatal and child health")	To increase the use of quality maternal, neonatal and child health services in the 4th health district of La Paz Department, By providing quality maternal, neonatal and child health services at health-care facilities in the 4th health district of La Paz Department, enabling local residents of the 4th health district of La Paz Department to proactively use maternal, neonatal and child health services, and strengthening the management structure to efficiently and effectively carry out maternal, neonatal and child health activities in the 4th health district of La Paz Department, Thereby contributing to improving the maternal, neonatal and child health state in in the 4th health district of La Paz Department. To improve the rate of receiving Maternal, Neonatal and Child Health (MNCH) services in 4 provinces in the south area, By appropriately operating and managing MNCH projects by the Provincial Health Office (PHO) and District Health Office (DHO), improving the knowledge and skills of health service providers on MNCH services, and strengthening local resident's awareness of MNCH projects through collaboration with various organizations, Thereby contributing to reducing the	26. Project for strengthening health network in Rural region focusing on mother and children health in Bolivia (Term of Cooperation: April 2010 - April 2014) 20. Project for Strengthening Integrated Maternal, Neonatal and Child Health Services in Laos (Term of Cooperation: April 2010 - April 2015)

			<p>in the target area (Supplement)</p> <p>(1) Stillbirth rate</p> <p>1.Indicator examples of overall goal (2)** (Basic)</p> <p>(1) The number of health committees organized after completion of the project</p> <p>(2) The rate of receiving antenatal care, the rate of births attended by skilled health workers, and the number of institutional deliveries in the target area***</p> <p>(3) The number of pregnancy complications in the target area</p> <p>2.Indicator examples of project purposes (Basic)</p> <p>(1) The average number of antenatal care visit</p> <p>(2) The rate of receiving antenatal care 4 times or more</p> <p>(3) The rate of receiving the first antenatal care by the fourth month of pregnancy</p> <p>(4) The rate of births attended by skilled health workers</p> <p>(5) The rate of pregnant women and newborns receiving antenatal and postnatal care</p> <p>(6) The number of institutional deliveries</p> <p>(7) Measles immunization rate (Supplement)</p> <p>(1) Vitamin A supplementation coverage</p> <p>(2) Contraceptive prevalence rate</p>	<p>**In cases where figures for indicator examples (1) cannot be obtained or there are other indicators more suitable for the project concerned.</p> <p>***In cases where it is expected that the project will only be implemented at the model site or in part of the target area, and will benefit the entire area after completion.</p> <p>[Refer to the following two indicator lists for indicators at a global level:] Global Reference List of 100 Core Health Indicators (WHO 2015) http://www.who.int/healthinfo/indicators/2015/en/</p> <p>SDG Targets and Indicators (also refer to Sheet 10) http://unstats.un.org/sdgs/indicators/indicators-list/</p>	<p>maternal, neonatal, and child mortality rates in 4 provinces in the south area.</p> <p>To improve the health state of women of reproductive age and neonates in the target district, By providing feedback on experiences and lessons learnt from the project to superior and related organizations, carrying out activities to obtain political support, improving the management of Health and Family Planning Offices in the target district, strengthening the system to provide safe delivery services in the target district and cities in the district, and enabling target people in the community to proactively utilize reproductive health services in cooperation with the private sector, Thereby contributing to standardizing the approaches of reproductive health services extracted from the project and the application of those approaches to other districts.</p> <p>To enable more women to receive quality antenatal and postnatal care in Sudan, By enhancing the organizational capacity of the Federal Ministry Of Health (FMOH) and the State Ministry Of Health (SMOH) in the field of maternal, neonatal and child health, enhancing the capacity of Village Midwives (VMW) to provide quality maternal and neonatal care in the target eight states of Sudan, and formulating a comprehensive approach and model for the improvement of maternal and neonatal health in Sennar State, Thereby contributing to reducing the maternal and infant mortality rates in Sudan.</p> <p>To improve maternal and neonatal health services utilizing</p>	<p>48. Safe Motherhood Promotion Project in Bangladesh (Term of Cooperation: April 2006 - March 2010)</p> <p>New. (Human resources for health) Frontline Maternal and Child Health Empowerment Project in Sudan (Mother Nile Project) Phase 2 (Term of Cooperation: September 2011 - September 2014)</p> <p>New. (Service delivery) Improvement of Maternal and</p>
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						<p>Community-Based Health Planning and Services (CHPS) provided by community health officers in the Upper West (UW) Region, By enhancing the capacity and systems for maternal and neonatal health services and strengthening community mobilization and support systems on maternal and neonatal health services, Thereby contributing to the continuous improvement of maternal and neonatal health services in the UW Region.</p> <p>To increase the number of pregnant women and newborns receiving safe delivery and antenatal and postnatal care in the target area of Eastern Visayas, By increasing facilities which provide Basic Emergency Obstetric and Newborn Care (BEmONC) services or practice Maternal, Neonatal and Child Health and Nutrition (MNCHN) administrative orders, enhancing the technical skills of government service providers in relation to BEmONC/MNCHN services, improving the managerial functions of the Center for Health Development Eastern Visayas Office and the Province/City Health Office in achieving and maintaining quality BEmONC/MNCHN services, organizing and operating female health teams in areas covered by the proposed BEmONC facilities, and enhancing political support for pregnant women (and their families) to access BEmONC/MNCHN services in areas covered by the proposed BEmONC facilities, Thereby contributing to reducing the maternal and infant mortality rates in the target area of Eastern Visayas.</p>	<p>Neonatal Health Services Utilising CHPS system in the Upper West Region, Ghana (Term of Cooperation: September 2011 - September 2016)</p> <p>New. (Maternal, neonatal and child health) Strengthening Maternal and Child Health Services in Eastern Visayas, the Philippines (Term of Cooperation: July 2010 - July 2016)</p>
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JICA standard indicator reference and typical lessons learned in technical cooperation projects (Health)

Model (4) “Health systems (Improving service quality)”

Development strategic objective	Mid-term objective	Indicators at a program goal level	Mid-term sub-target	Overall goals/Project purposes and indicator examples	Methods/Policies for setting indicators	Typical lessons learned	Example of project purpose (image of projects)	Reference projects
Development strategic objective	Development thematic issue level to which the cooperation program corresponds	Connection with the target years or indicators in sector/regional development plans by the recipient country’s government	Level of thematic issue to solve in individual projects	To . . . (outcome) By/through . . . (output) Thereby contributing to (impact) Indicator examples	Ways of thinking, points to remember, and important points in setting indicators	Write in lessons and risks to be necessarily used or reflected in implementing projects corresponding to the “mid-term sub-targets” from the perspectives of: 1) planning stages, and 2) management.	Examples of project purpose	Project information with good practices to refer to
Health systems	1 Service delivery		1-5 Improving service quality	<p>(Proposed model description) To improve efficiency and quality of operations (improve the hospital environment, shorten waiting time, reduce excess inventory, etc.), (Outcome) By improving management of the facilities and equipment as well as work (operations) at health facilities (as well as improving health facilities through financial cooperation.)*, (Output) Thereby contributing to improving the quantity and quality of medical services. (Impact)</p> <p>(Standard indicator examples) 1.Indicator examples of overall goal (Basic) (1) Patient satisfaction increases from xx (baseline value) to yy. (2) The number of medical errors and accidents reduces from xx to yy. (3) Hospital-Acquired infection rate (4) Indicators for the major service utilization (institutional delivery rate and immunization rate, etc.) improve.</p>	<p>*Health-care facilities and also community-level activities which strengthen the provision of service and bring about service demand through volunteers are subject to the proposed model description.</p> <p>**Indicators are to be set after confirming that monitoring and measurement will continue to be carried out by the implementation organizations, etc. after completion of the project.</p>	<p>- Effective approaches to “Health systems strengthening” As it is difficult to produce tangible achievements in a short period of time from activities for health system improvement without any investment in facilities, there may be a tendency for the health staff engaged in implementation of the project to lose their motivation. In order to prevent health staff from losing motivation, they need something to make them realize their achievements. In this project, managers and service providers can realize their achievements such as a reduction in the number of out-of-inventory days for medicines, etc. by carrying out activities related to the inventory management of medicines. In implementing similar projects that have the aim of strengthening health systems, it is effective to create a design that has an element of showing visible achievements. (From the Reference Project 56. written on the right)</p>	<p>To improve health infrastructure management and utilization, By expanding 5S-KAIZEN-TQM activities to the target hospital, improving the utilization of medical equipment at the target hospital, and improving the maintenance and management of medical equipment at the target hospital and at the medical equipment maintenance and management workshop, Thereby contributing to improving the health service supply through the more effective and efficient utilization of existing health infrastructures.</p> <p>To improve the quality of medical services in the target two provinces through strengthening the Direction Office for Healthcare Activities (DOHA) and referral system, By strengthening the managerial capacity of the Medical Service Administration, Ministry of Health on DOHA necessary to disseminate the “Hoa Binh model” to the target northern mountainous provinces, establishing a referral system from the commune to district and provincial hospitals in Hoa Binh Province, and strengthening the managerial capacity for DOHA and the referral system between the provincial hospital and district hospitals in the five provinces (Son La, Dien Bien, Lao Cai, Lai Chau, and Yen Bai) which are introducing the Hoa Binh model, Thereby contributing to strengthening the DOHA and referral system in all the northern mountainous provinces and improving the quality of medical services.</p>	<p>28. Project on Improvement of Health Service through Health Infrastructure Management in Uganda (Term of Cooperation: March 2011 - June 2014)</p> <p>14. Project for Strengthening Medical Services in Northern Mountainous Provinces in Vietnam (Term of Cooperation: July 2012 - June 2016)</p>

2. Indicator examples of project purposes (Basic)
 (1) Shortening patient's waiting time
 (2) Employee satisfaction (workplace environment, work efficiency)
 (3) The number of out-of-inventory days reduces to xx (from yy).

WHO Global Reference List of 100 Core Health Indicators (WHO, 2015) provides core indicators for health service access, quality, and safety.
<http://www.who.int/healthinfo/indicators/2015/en/>

[Refer to the following indicator list for indicators at global level:]
 SDG Targets and Indicators (also refer to Sheet 10)
<http://unstats.un.org/sdgs/indicators/indicators-list/>

To operate an urban health system model in Kabul,
 By developing an urban health system model and enhancing the managerial functions (planning, budgeting, fund procurement, monitoring, evaluation, etc.) of Kabul Public Health Department (KPHD),
 Thereby contributing to the effective and efficient provision of urban health services in urban areas of Kabul.

To strengthen the local health system in Benguet Province to improve medical services,
 By improving systems that provide quality health services at health centers, enhancing the health administrative capacity of the province, enhancing the health finance of the province, strengthening the medicine supply system of the province, and sharing project information and experience between the Ministry of Health and other Formula One member provinces,
 Thereby contributing to improving the health state of local residents in Benguet Province.

To implement human resource development activities in the Ministry of Health, the three target hospitals (Bach Mai Hospital, Hue Central Hospital, and Cho Ray Hospital), and the central and provincial hospitals directly controlled by the Ministry of Health, based on human resource policies and strategies for medical services developed by the Ministry of Health,
 By revising and developing human resource master plan and regulations in medical services, standardizing training curricula and materials, using the curricula and materials at DOHA training centers which are part of the medical service managerial capacity improvement center of the Ministry of Health, the three target hospitals, and the central and provincial hospitals directly controlled by the Ministry of Health, strengthening the training system, operating the system at the medical service managerial capacity improvement center of the Ministry of Health, the three target hospitals, and the central and provincial hospitals directly controlled by the Ministry of Health, and developing and applying the

3. Urban Health System Strengthening Project in Afghanistan (Term of Cooperation: December 2009 - December 2012)

56. Project of Strengthening of Local Health System in the Province of Benguet, the Philippines (Term of Cooperation: March 2006 - March 2011)

15. Project for Improvement of the Quality of Human Resources in the Medical Service System in Vietnam (Term of Cooperation: June 2010 - June 2015)

						<p>monitoring and evaluation system for quality of training for health staff, Thereby contributing to improving the medical services in medical institutions in Vietnam.</p> <p>To enhance the administrative capacity of Ghana Health Services (GHS) for the Community Based Health Planning and Services (CHPS) policy in the Upper West Region, By enhancing the knowledge and skills of the Upper West Regional Health Directorate, district health management teams, and sub-district health management teams on CHPS administration, enhancing the knowledge and skills of the Community Health Officers (CHO) on CHPS activities, improving the supervision system for CHPS activities, improving the referral counter referral system between CHPS, clinics, and hospitals, improving procedures for community mobilization for CHPS activities, and disseminating lessons and best practices, Thereby contributing to expanding the functions of the CHPS zones.</p> <p>To expand the approaches to improve Maternal and Neonatal Health (MNH) service quality and utilization in line with Health, Population, and Nutrition Sector Development Program (HPNSDP) in Bangladesh, By strengthening coordination functions (at MNCH forum, etc.) for maternal and neonatal protection activities carried out by related stakeholders at a national level, disseminating the implementation process and lessons of best practices in maternal, neonatal and child health improvements from the project and the results of the phase 1 project to the national level, and confirming the mechanism and structure of MNCH minimum package and approaches in Satkhira and Habiganj Districts which are integrated into the Upazila Health System (UHS) and implemented in cities in the districts, Thereby contributing to improving the maternal and neonatal health status in Bangladesh.</p> <p>To strengthen the health service network for local residents in the target areas to receive quality prevention, promotion, and medical care,</p>	<p>57. Scaling up of Community Based Health Planning and Services (CHPS) Implementation in the Upper West Region, Ghana (Term of Cooperation: March 2006 - February 2010)</p> <p>11. Safe Motherhood Promotion Project in Bangladesh Phase 2 (Term of Cooperation: July 2011 - June 2016)</p> <p>58. Project for improvement of health service delivery at community level in Bolivia (Term of Cooperation: April 2007 - October 2012)</p>
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						<p>By utilizing the knowledge obtained by health staff at health facilities and staff at the health district office to maintain the quality of services provided, exercising of health rights by organized local residents that have information to proactively participate in coordination with the health network, having an appropriately operational referral counter referral system at prefecture and health network levels, introducing and operating an administrative and financial management system in health-care facilities, positioning the reliability of medical diagnostic technology as one of the items of the national health system, and institutionalizing the project activity methods from the Ministry of Health and Sports, prefectural health offices, and municipal offices, Thereby contributing to improving the health state of local residents in the target areas in line with the millennium goal.</p> <p>To improve maternal and neonatal health services utilizing Community-Based Health Planning and Services (CHPS) provided by community health officers in the Upper West (UW) Region, By enhancing the capacity and systems for maternal and neonatal health services and strengthening community mobilization and support systems on maternal and neonatal health services, Thereby contributing to the continuous improvement of maternal and neonatal health services in the UW Region.</p>	<p>New. (Service delivery) Improvement of Maternal and Neonatal Health Services Utilising CHPS system in the Upper West Region, Ghana (Term of Cooperation: September 2011 - September 2016)</p>
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JICA standard indicator reference and typical lessons learned in technical cooperation projects (Health)

Model (5) “Health systems (Leadership and governance)”

Development strategic objective	Mid-term objective	Indicators at a program goal level	Mid-term sub-target	Overall goals/Project purposes and indicator examples	Methods/Policies for setting indicators	Typical lessons learned	Example of project purpose (image of projects)	Reference projects
Development strategic objective	Development thematic issue level to which the cooperation program corresponds	Connection with the target years or indicators in sector/regional development plans by the recipient country’s government	Level of thematic issue to solve in individual projects	To . . . (outcome) By/through . . . (output) Thereby contributing to (impact) Indicator examples	Ways of thinking, points to remember, and important points in setting indicators	Write in lessons and risks to be necessarily used or reflected in implementing projects corresponding to the “mid-term sub-targets” from the perspectives of: 1) planning stages, and 2) management.	Examples of project purpose	Project information with good practices to refer to
Health systems	2 Leadership and governance		2-1 Health administration management	<p>(Proposed model description) To improve the capacity of health officers and the organizational capacity of health management teams in the target provinces, (Outcome) By enhancing the capacity of the health management teams in the target provinces for project cycles (planning, implementation, monitoring, and evaluation, etc.), (Output) - Thereby contributing to increasing the quality of medical services in primary health-care in the target provinces. - Experiences of the target provinces are reflected in the central government’s policy. (Impact)</p> <p>(Standard indicator examples) 1. Indicator examples of overall goal (Basic) (1) The rate of health staff (or health facilities) who provide services using existing appropriate guidelines increases from xx to xx in the target provinces. (2) Indicators adopted as core health indicators (related to maternal, neonatal and child health, HIV, malaria, etc.) improve in the target provinces. (3) The number/rate of provinces that expand the introduction of supportive supervision and mentoring as well as the M&E system</p>	<p>*Not only approaches limited to the target areas but also support for the operation of a national policy and strategy (such as support provided during the technical project to strengthen the community health strategy in Kenya) are subject to the proposed model description.</p> <p>**If areas in other provinces are set as part of the target area for the indicator of the overall goal, it is important to set up promotion/scaling up activities from the pilot province to the other provinces as part of the project output. (If it is difficult to include these activities into the project output, the target area for the overall goal should be limited to the pilot</p>	<p>When formulating a new project, strengthening of not only the central government but also the human resources who are directly involved in improving the health indicators and directly intervene in the facilities should be considered to the greatest extent possible. This project successfully expanded the support target to the national level as well as the community level (health facilities) by selecting intermediate managerial human resources as the target for capacity development. As a result, support could be easily provided to all administration levels in a short period of time (four years). (From the Reference Project 31. written on the right)</p>	<p>To improve the capacity of health officers in Nyanza Province and the organizational capacity of health management teams at the province and prefecture levels, By enhancing the basic managerial capacity of the health management teams in Nyanza Province, enhancing the capacity of the health management teams in Nyanza Province for project cycles (planning, implementation, monitoring, and evaluation, etc.), enhancing the supervision and instruction capacity of the health management teams in Nyanza Province, sharing lessons and successful examples of achievements of these enhancements with other provinces and the central government, and strengthening the health administration networks all over the country through the process of sharing, Thereby contributing to increasing the quality of medical services in primary health-care in Nyanza Province.</p> <p>To enhance the output-oriented managerial capacity of regional medical departments and health districts in Tambacounda and Kedougou, By improving the planning capacity and monitoring and evaluation (M&E) capacity in regional medical departments and health districts, improving the capacity of regional medical departments and health districts for management of resources (human resources, accounting/financial resources, medicines, medical materials/equipment, and facilities/equipment), and sharing the project experience inside and outside Tambacounda and Kedougou, Thereby contributing to improving the health state of local residents in Tambacounda and Kedougou.</p>	<p>31. Strengthening Management for Health in Nyanza Province, Kenya (Term of Cooperation: May 2009 - May 2013)</p> <p>36. Enforcement of Management of Health System in Tambacounda and Kedougou, Senegal (Term of Cooperation: March 2011 - February 2014)</p>

			<p>increases.</p> <p>2.Indicator examples of project purposes (Basic)</p> <p>(1) Comprehensive capacity of health officers evaluated by others or themselves improves from xx to yy.</p> <p>(2) Organizational capacity of health management teams evaluated by others or themselves improves from xx to yy.</p> <p>(3) Scheduled activity plans and annual plans of local governments have been implemented in xx% or more of the target provinces.</p> <p>(4) Comprehensive Supportive Supervision and Mentoring (CSS&M) and M&E system developed during the project operate sufficiently in xx% or more of the target provinces.</p>	<p>province.)</p> <p>Indicators for leadership and governance, which are provided by WHO according to the six blocks of a health system, can also be a good reference. (e.g. Existence of an up-to-date national health strategy linked to national needs and priorities, etc.)</p> <p>http://www.who.int/healthinfo/systems/WHO_MBHS_S_2010_full_web.pdf</p> <p>[Refer to the following two indicator lists for indicators at a global level:]</p> <p>Global Reference List of 100 Core Health Indicators (WHO 2015)</p> <p>http://www.who.int/healthinfo/indicators/2015/en/</p> <p>SDG Targets and Indicators (also refer to Sheet 10)</p> <p>http://unstats.un.org/sdgs/indicators/indicators-list/</p>	<p>With regard to the indicators for capacity development of managerial human resources through training and the project to change their mindset and behavior, it is desirable to set both objective indicators and subjective indicators, and to set quantitative and qualitative indicators for each objective as well as subjective indicators.</p> <p>In order to monitor any changes and objectively measure achievements, it is important to fully consider the M&E framework in advance. For example, if a hypothesis with the phases “Capacity improvement” -> “Change in workplace environment” -> “Improvement of service quality” is formed, a quantitative indicator to measure the achievement of each phase should be set and an appropriate M&E framework should be established.</p> <p>Only after setting and establishing such indicators and framework, can regular monitoring and timely follow ups during the project be implemented, and the effect of intervention can be measured as precisely as possible at the time of completing the project.</p> <p>(From the Reference Project 31. written on the right)</p>	<p>To build Comprehensive Supportive Supervision and Mentoring (CSS&M) and an effective M&E system for HIV and AIDS control-related health services, and establish them with a plan for further nationwide development,</p> <p>By selecting and integrating Scorecard Indicators for M&E at the national level, strengthening the M&E system in model regions, strengthening the coordination capacity of CSS&M in the National AIDS Control Programme (NACP), enhancing the capacity of national supervisors and mentors, and strengthening CSS&M in the model regions,</p> <p>Thereby contributing to strengthening the health systems in Tanzania through CSS&M and an effective M&S system for HIV and AIDS control-related health services.</p> <p>To strengthen the ISSV cycle at the Ministry of Health and Sanitation and prefectural health management offices in 13 prefectures to improve the maternal, neonatal and child health services provided at primary</p>	<p>38. Health Systems Strengthening for HIV and AIDS Services Project in Tanzania (Term of Cooperation: October 2010 - October 2014)</p> <p>34. Project for Strengthening Supportive Supervision System in Sierra Leone (Term of Cooperation: April 2013 - March 2017)</p>
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						<p>medical institutions, By enhancing the capacity of the Ministry of Health and Sanitation to support prefectural health management offices in 13 prefectures, strengthening the ISSV cycle for primary medical institutions at prefectural health management offices in the target four prefectures, and improving the maternal, neonatal and child health services provided at primary medical institutions selected by prefectural health management offices in the target four prefectures through small-scale projects, Thereby contributing to improving the maternal, neonatal and child health services provided at all primary medical institutions.</p> <p>To strengthen the evidence-based policy cycle for implementation of Community Health Strategy (CHS) through developing the capacity of the Ministry of Public Health & Sanitation, By strengthening coordinating, cooperating, and collaborating over CHS operations between stakeholders, developing and revising guidelines/tools in the fields of communication and training, developing a CHS Monitoring & Evaluation (M&E) plan, assessing the effectiveness of the CHS policies/guidelines/tools through Operations Research (OR), and sharing and presenting the results of that assessment to policy level, Thereby contributing to accelerating the effective implementation of CHS.</p>	<p>59. Project for Strengthening Community Health Strategy in Kenya (Term of Cooperation: October 2011 - September 2014)</p>
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JICA standard indicator reference and typical lessons learned in technical cooperation projects (Health)
Model (6) “Health systems (Strengthening human resources and educational systems for health)”

Development strategic objective	Mid-term objective	Indicators at a program goal level	Mid-term sub-target	Overall goals/Project purposes and indicator examples	Methods/Policies for setting indicators	Typical lessons learned	Example of project purpose (image of projects)	Reference projects
Development strategic objective	Development thematic issue level to which the cooperation program corresponds	Connection with the target years or indicators in sector/regional development plans by the recipient country’s government	Level of thematic issue to solve in individual projects	To . . . (outcome) By/through . . . (output) Thereby contributing to (impact) Indicator examples	Ways of thinking, points to remember, and important points in setting indicators	Write in lessons and risks to be necessarily used or reflected in implementing projects corresponding to the “mid-term sub-targets” from the perspectives of: 1) planning stages, and 2) management.	Examples of project purpose	Project information with good practices to refer to
Health systems	4 Human resources for health		4-1 Strengthening continuous education systems	<p>(Proposed model description (1)) To improve the educational basis for quality co-medicals, (Outcome) By improving the training system of existing teachers, (Output) Thereby contributing to the development of quality co-medicals through systems that develop human recourses for health. (Impact)</p> <p>(Proposed model description (2)) To secure the necessary human resources for health, (Outcome) By improving their treatment and work management, (Output) Thereby contributing to resolving the shortage of human resources. (Impact)</p> <p>(Standard indicator examples) (Proposed model description (1)) 1.Indicator examples of overall goal (Basic) (1) The rate of people passing the graduation exam becomes xx% (for the yy-st/nd/rd/th examination). (2) The existing training database is updated.* (3) The target number of trained human resources for health, which is provided in the health training plan, is achieved.</p>			<p>To improve the educational basis for quality co-medicals by enhancing the Department of Human Resources Development (HRDD) capacity, By strengthening the HRDD capacity through improvement of the training system of existing teachers, strengthening the HRDD capacity through development of the production system of new teachers, and strengthening the HRDD capacity on monitoring existing regulations and developing basic regulations for co-medicals, Thereby contributing to the development of quality co-medicals through the human recourses for health development system.</p> <p>To strengthen the management system and implementation capacity of the existing training for Basic Health Staff (BHS) in central, state/region, township Training Teams (TT), By reorganizing central TT to reflect the current situation, enhancing the management system and training capacity of central TT, enhancing the management system and training capacity of state/region TT, and enhancing the management system and training capacity of township TT, Thereby contributing to the implementation of quality existing training based on the training plan at central, state/region, township levels on an as-needed basis.</p> <p>To develop a system that</p>	<p>7. Project for Strengthening Human Resources Development System of Co-medicals in Cambodia (Term of Cooperation: March 2010 - February 2015)</p> <p>17. The Project for Strengthening Capacity of Training Teams for Basic Health Staff in Myanmar (Term of Cooperation: May 2009 - May 2014)</p> <p>43. The project for strengthening</p>

			<p>(4) Internal monitoring and evaluation at health training institutes, and supportive supervision and mentoring by the training department are conducted according to the procedures.</p> <p>(Proposed model description (2)) 1.Indicator examples of overall goal (Basic) (1) The number of human resources for health increases from xx to yy in the target area. (2) The number of health facilities satisfying the standards (admission capacity) of the Ministry of Health increases from xx to yy in the target area.</p> <p>(Proposed model description (1)) 2.Indicator examples of project purposes** (Basic) (1) The number of teachers and mentors increases from xx to yy. (2) The quality of existing teachers improves (based on ability tests before and after training). (3) The rate of training implemented in accordance with the training plan becomes xx% or more. (4) A standardized, unified (national) graduation exam is launched by the year xx. (5) Of the teachers and associate teachers who have taken teacher training on education and instruction methods, the number providing classes based on the standardized curriculum under continuous monitoring and evaluation becomes xx% or more.</p> <p>(Proposed model description (2)) 2.Indicator examples of project purposes (1) The rate of health school graduates employed by health facilities</p>	<p>**Indicators for the health workforce, which are provided by WHO according to the six blocks of a health system, can also be a good reference. (e.g. Number of senior staff at primary health-care facilities who received in-service management training, Percentage of health service providers at primary health-care facilities who received personal supervision in the past six months, etc.)</p> <p>http://www.who.int/healthinfo/systems/WHO_MBHS_S_2010_full_web.pdf</p>	<p>continuously produces human resources for health (medical experts, preventive medicine personnel, nurses, nurses for maternal, neonatal and child health, pharmacy technicians, clinical laboratory technicians) who can provide appropriate health services at health training institutes by improving systems for the quality management of existing teachers and associate teachers as well as human resources for health that are yet to be developed, By standardizing curricula and instruction manuals (instruction procedures for teachers/associate teachers and textbooks for students) for six preferential specialized courses using guidelines that stipulate the development/revision of the curricula and instruction manuals, implementing training for teachers and associate teachers on education and instruction methods, and introducing monitoring and evaluation, supportive supervision and mentoring, and a unified graduation examination, Thereby contributing to the development of quality human resources for health at health training institutes.</p> <p>To strengthen the health training system which provides uniform and quality services based on the CHIPU (Complex Hospital Institute Project University) concept, By developing and instituting a system that will form the basis for nursing education, enhancing the capacity of health training institutes to implement good personnel development programs, and strengthening the coordination mechanism between related organizations for effective improvement of the health training system, Thereby contributing to the development of quality human resources for health and contributing to the improvement of maternal, neonatal and child health services.</p>	<p>pedagogical and technical skills of teachers of health training institute in Mozambique (Term of Cooperation: January 2012 - January 2016)</p> <p>18. Project for Sustainable Development of Human Resource for Health to Improve Maternal, Neonatal and Child Health Services in Laos (Term of Cooperation: February 2012 - February 2016)</p>
				[Refer to the following two	To enhance the capacity of those	32. Support to Human Resource

				<p>indicator lists for indicators at a global level:] Global Reference List of 100 Core Health Indicators (WHO 2015) http://www.who.int/healthinfo/indicators/2015/en/SD</p> <p>SDG Targets and Indicators (also refer to Sheet 10) http://unstats.un.org/sdgs/indicators/indicators-list/</p>	<p>offices related to the development of human resources for health to implement the Plan National de Développement des Ressources Humaines en Santé (PNDRHS), By enhancing the organizational operations capacity of those offices related to the development of human resources for health, creating and approving PNDRHS 2011-2015, developing regulations within the Ministry of Public Health necessary to implement PNDRHS, and establishing an information management system for human resources for health, Thereby contributing to the implementation of PNDRHS.</p>	<p>Development in health sector of DRC in Congo (Term of Cooperation: November 2010 - October 2013)</p>
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JICA standard indicator reference and typical lessons learned in technical cooperation projects (Health)
Model (7) “Health systems (Health information)”

Development strategic objective	Mid-term objective	Indicators at a program goal level	Mid-term sub-target	Overall goals/Project purposes and indicator examples	Methods/Policies for setting indicators	Typical lessons learned	Example of project purpose (image of projects)	Reference projects
Development strategic objective	Development thematic issue level to which the cooperation program corresponds	Connection with the target years or indicators in sector/regional development plans by the recipient country’s government	Level of thematic issue to solve in individual projects	To . . . (outcome) By/through . . . (output) Thereby contributing to (impact) Indicator examples	Ways of thinking, points to remember, and important points in setting indicators	Write in lessons and risks to be necessarily used or reflected in implementing projects corresponding to the “mid-term sub-targets” from the perspectives of: 1) planning stages, and 2) management.	Examples of project purpose	Project information with good practices to refer to
Health systems	5 Health information		5-1 Information collection (Surveillance system) 5-2 Information analysis and utilization	(Proposed model description) To appropriately provide reliable information to the various decision makers at central level and community level including grassroots health facilities, (Outcome) By establishing a health information system for collection, organization, analysis, and transmission of information on regional health state, its determining factors, and the performance of health facilities, etc. based on data collected from health facilities or communities in the target area, (Output) Thereby contributing to evidence-based appropriate decision making at each level. (Impact) (Standard indicator examples) 1.Indicator examples of overall goal (Basic) (1) The number of health policies and plans developed based on the evidence obtained from the health information system becomes xx or more. 2.Indicator examples of project purposes (Basic) (1) Improved information accuracy (based on the cross check results, accuracy of	*Support to strengthen the health information provided to specific domains in the health sector, such as infection surveillance (in Ethiopia) and information system on human resources for health (in Tanzania, South Sudan, DRC), etc., are also subject to the proposed model description.	- Appropriate treatment of counterpart organizations that are having problems Project activities delayed due to the non-cooperation of the National Health Information Resource Center (NHIRC). In case of a problem with the counterpart organization, it is necessary to involve the senior organization of the counterpart organization and the contact organizations for the acceptance of assistance from overseas (Ministry of Health and Economic Affairs Bureau (EAD) in the case of Pakistan) in the early stages in order to solve the problem. (From the Reference Project 10. written on the right) In this project, cooperation of the community volunteers is essential to establish the community-based surveillance system. In Ethiopia which has relatively strong communities, the project was successfully	To perform evidence-based conventional tasks and budget planning using the District Health Information System (DHIS) in Pakistan, By developing a nationwide development strategy for DHIS, approving this strategy at the national health information system management committee, having relevant employees at the National Health Information Resource Center (NHIRC) and the provincial/prefectural health offices take DHIS promotion training at the Ministry of Health, NHIRC, and the provincial health offices, by completely, accurately, and appropriately collecting DHIS data from public primary and secondary medical institutions at the prefectural health office, entering the collected data in the DHIS software as well as aggregating and analyzing the data at the prefectural health office, aggregating and analyzing the results of the aggregation and analysis at the Ministry of Health, NHIRC, and the provincial health offices, identifying and utilizing evidence-based allocation of resources (health staff, medicines, etc.) and items for budget allocation at the prefectural and provincial health offices using the results of the DHIS analysis, and appropriately coordinating DHIS promotion between the Ministry of Health-related organizations and the assistance agencies in other countries, Thereby contributing to the development of an evidence-based national health policy/strategy using DHIS in Pakistan. To operate a surveillance/response system based on effective facilities and communities in the target area, By establishing a surveillance system based on effective facilities in the pilot area, approving the effectiveness	10. DHIS Project for Evidence-Based Decision Making and Management (THE DISTRICT HEALTH INFORMATION SYSTEM PROJECT FOR EVIDENCE-BASED DECISION MAKING AND MANAGEMENT) (Term of Cooperation: July 2009 - June 2012) 54. Strengthening Infectious Disease Prevention, Control and Response in Amhara Region, Ethiopia (Term of Cooperation: January 2008 - January 2015)

<p>xx% is secured.) (2) Improved information completeness (xx% of the information items is provided.) (3) Improved promptness of information transmission (Information is collected/provided on a regular basis (xx times per year/month).) (4) Quality assessment in accordance with international standards (Data Quality Assessment Framework, etc.) is conducted xx times.**</p>	<p>the quality of health information</p> <p>Indicators for health information systems, which are provided by WHO according to the six blocks of a health system, can also be a good reference. (e.g. Percentage of districts that submit timely, complete, accurate reports to the national level, etc.) http://www.who.int/healthinfo/systems/WHO_MBHS_S_2010_full_web.pdf</p> <p>[Refer to the following two indicator lists for indicators at a global level:] Global Reference List of 100 Core Health Indicators (WHO 2015) http://www.who.int/healthinfo/indicators/2015/en/</p> <p>SDG Targets and Indicators (also refer to Sheet 10) http://unstats.un.org/sdgs/indicators/indicators-list/</p>	<p>implemented by adopting procedures to select reliable human resources in each community as volunteers. In order to effectively introduce and utilize these community volunteers, it is necessary to carefully research the situation of the social communities, utilize any existing community volunteer systems, and to appropriately select and appoint human resources. (From the Reference Project 54. written on the right)</p>	<p>of the system, developing a surveillance system based on established facilities in the target area, establishing a surveillance system based on effective communities in the pilot area, approving the effectiveness of the system, developing a surveillance system based on established communities in the target area, strengthening the health and medical response capacity based on surveillance data in the pilot area, and establishing a model that connects the facility-based system with the community-based system, Thereby contributing to the operation of surveillance/response systems based on effective facilities and communities in the Amhara Region.</p> <p>To develop a plan to develop human resources for health at central, regional, and prefectural levels, and improve the education, development, and training of human resources for health who can provide quality health services, By enhancing the planning capacity of human resources for health at central, regional, and prefectural levels, and improving the capacity of health training institutions related to the improving the quality of health services, Thereby contributing to improving the quality of health services in the target area.</p> <p>To promote the development of human resources for health through developing the capacity of the Ministry of Health and provincial health offices, By enhancing their organizational capacity to enable the Ministry of Health and provincial health offices to effectively implement policies and plans for human resource for health development, improving and utilizing the Human Resource Information</p>	<p>39. Strengthening Development of Human Resource for Health in Tanzania (Term of Cooperation: November 2010 - October 2014)</p> <p>52. Human Resource Development for Health in Southern Sudan (Term of Cooperation: March 2009 - July 2013)</p>
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						<p>System (HRIS) at the Ministry of Health, and enhancing their capacity to train management through the independent implementation of pilot training by the Ministry of Health and provincial health offices, Thereby contributing to increasing the provision of health services in South Sudan through the development of human resources for health.</p> <p>To enhance the capacity of those offices related to the development of human resources for health to implement the Plan National de Development des Ressources Humaines en Santé (PNDRHS), By enhancing the organizational operations capacity of those offices related to the development of human resources for health, creating and approving PNDRHS 2011-2015, developing regulations within the Ministry of Public Health necessary to implement PNDRHS, and establishing an information management system for human resources for health, Thereby contributing to the implementation of PNDRHS.</p>	<p>32. Support to Human Resource Development in health sector of DRC (Term of Cooperation: November 2010 - October 2013)</p>
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**JICA standard indicator reference and typical lessons learned in technical cooperation projects (Health)
Model (8) “Health systems (Medical equipment, etc.)”**

Development strategic objective	Mid-term objective	Indicators at a program goal level	Mid-term sub-target	Overall goals/Project purposes and indicator examples	Methods/Policies for setting indicators	Typical lessons learned	Example of project purpose (image of projects)	Reference projects
Development strategic objective	Development thematic issue level to which the cooperation program corresponds	Connection with the target years or indicators in sector/regional development plans by the recipient country’s government	Level of thematic issue to solve in individual projects	To . . . (outcome) By/through . . . (output) Thereby contributing to (impact) Indicator examples	Ways of thinking, points to remember, and important points in setting indicators	Write in lessons and risks to be necessarily used or reflected in implementing projects corresponding to the “mid-term sub-targets” from the perspectives of: 1) planning stages, and 2) management.	Examples of project purpose	Project information with good practices to refer to
Health systems	6 Medicines, vaccines, and technology		6-1 Quality control 6-2 Stable procurement 6-6 Facility and equipment maintenance	(Proposed model description) To improve the maintenance and management capacity of medical equipment, (Outcome) By improving and utilizing the guidelines on maintenance and management of medical equipment, (Output) Thereby contributing to improving the condition of medical equipment at medical institutions. (Impact)		In order to secure financial sustainability of the project, support to develop budgets should also be provided during the project. It is desirable to include the necessary expenses (for repair/maintenance of medical equipment, inventory control training, traveling, and promotional activities, etc.) in the total annual expenses at the time of budget planning. (From the Reference Project 51. written on the right)	To improve the capacity for maintenance and management of medical materials and equipment at medical institutions of all levels (primary, secondary, and tertiary) through planning and efficient operation of health capital investment, By improving and utilizing plans and systems for the maintenance of medical materials and equipment in the target area, improving and utilizing medical equipment standards applied at secondary and tertiary hospitals in the target area, developing a “procurement plan” which provides procurement procedures and appropriate operations, maintenance, and management (preventive management) of medical materials and equipment, and developing a monitoring and evaluation system for the operation, maintenance, and management of medical materials and equipment as part of the Health Management Information System (HMIS), Thereby contributing to improving the condition of medical materials and equipment at medical institutions of all levels based on the national health strategy goal program.	5. Health Capital Investment Support Project in Zambia (Term of Cooperation: April 2009 - March 2012)
				(Standard indicator examples) 1.Indicator examples of overall goal (Basic) (1) xx% or more* of “major medical equipment” provided in the guidelines on maintenance and management of medical equipment is functional. (2) The operating rate of medical equipment (specific name) increases by xx% since completion of the	*Based on the assumption that the medical equipment subject to confirmation of its operating condition is clarified (such as equipment from across the country, in the region, or in specific medical institutions, etc.), and the equipment is continuously monitored by the implementing organization.			

			<p>project.* (3) Medical equipment requiring repair reduces by xx%.* (4) The inventory reduces to xx in terms of monetary amount.</p> <p>2.Indicator examples of project purposes (Basic) (1) The “medical equipment management monitoring score” becomes xx or more. (2) The time required between request and action to renew medical equipment and the purchase of spare parts is shortened. (3) The number of days of out-of-medical equipment/spare parts inventory reduces to xx.</p>	<p>Indicators for access to essential medicines, which are provided by WHO according to the six blocks of a health system, can also be a good reference. (e.g. Existence and year of the last update of the published national list of essential medicines, etc.) http://www.who.int/healthinfo/systems/WHO_MBHS_S_2010_full_web.pdf</p> <p>[Refer to the following two indicator lists for indicators at a global level:] Global Reference List of 100 Core Health Indicators (WHO 2015) http://www.who.int/healthinfo/indicators/2015/en/</p> <p>SDG Targets and Indicators (also refer to Sheet 10) http://unstats.un.org/sdgs/indicators/indicators-list/</p>			<p>To establish the “Medical Equipment Management System of Cambodia” and implement medical equipment management through collaboration between the National Workshop Team (NWT) of the Ministry of Health, the target Complementary Package of Activities 3/National Hospital (CPA3/NH), and the target Complementary Package of Activities 2 (CPA2), By establishing systems for medical equipment management (including maintenance, inspection, simple repair, allocation, and budget planning, etc.) to be implemented by the entire CPA3/NH, strengthening medical equipment management activities at leading CPA3/NH which play a central role in the “Medical Equipment Management System of Cambodia”, enhancing the capacity necessary to provide instructions to CPA2, building the basis of a consultation, support, and supervision network for medical equipment management between NWT, leading CPA3/NH, and the target CPA2, and enhancing the supervisory function of NWT for medical equipment management, Thereby contributing to stabilizing the “Medical Equipment Management System of Cambodia” established in this project and spreading the system to CPA2 other than the target CPA2.</p> <p>To establish systems for the efficient and appropriate, management and utilization of medicines, medical products, and medical equipment at national and prefectural levels, By establishing systems to support the national and prefectural levels through the Medical Equipment Service Center (MES) and the logistics center, improving the management, maintenance, and repair capacity of medical equipment maintenance engineers at MES and central/prefectural hospitals, improving the managerial capacity of managers at central/prefectural hospitals, and improving the capacity of personnel in charge of inventory</p>	<p>45. The Project on Strengthening of Medical Equipment Management in Referral Hospitals in Cambodia (aka “MEDEM-2”) (Term of Cooperation: July 2009 - June 2014)</p> <p>51. Project for Strengthening Medical Logistics in Laos (Term of Cooperation: May 2005 - April 2008)</p>
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						<p>control in the logistics center and the target four prefectures for storage, handling, and inventory control of medicines and medical products, Thereby contributing to the efficient and appropriate management and utilization of medicines, medical products, and medical equipment.</p> <p>To improve health infrastructure management and utilization, By expanding 5S-KAIZEN-TQM activities to the target hospital, improving the utilization of medical equipment at the target hospital, and improving the maintenance and management of medical equipment at the target hospital and at the medical equipment maintenance and management workshop, Thereby contributing to improving the health service supply through the more effective and efficient utilization of the existing health infrastructures.</p>	<p>28. Project on Improvement of Health Service through Health Infrastructure Management in Uganda (Term of Cooperation: March 2011 - June 2014)</p>
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SDGs Target and Indicators (Goal 3)

3.1 By 2030, reduce the global maternal mortality ratio to less than 70 per 100,000 live births	3.1.1 Maternal mortality ratio
	3.1.2 Proportion of births attended by skilled health personnel
3.2 By 2030, end preventable deaths of newborns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births and under-5 mortality to at least as low as 25 per 1,000 live births	3.2.1 Under-five mortality rate
	3.2.2 Neonatal mortality rate
3.3 By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases	3.3.1 Number of new HIV infections per 1,000 uninfected population, by sex, age and key populations
	3.3.2 Tuberculosis incidence per 1,000 population
	3.3.3 Malaria incidence per 1,000 population
	3.3.4 Hepatitis B incidence per 100,000 population
3.4 By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being	3.3.5 Number of people requiring interventions against neglected tropical diseases
	3.4.1 Mortality rate attributed to cardiovascular disease, cancer, diabetes or chronic respiratory disease
3.5 Strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol	3.4.2 Suicide mortality rate
	3.5.1 Coverage of treatment interventions (pharmacological, psychosocial and rehabilitation and aftercare services) for substance use disorders
3.6 By 2020, halve the number of global deaths and injuries from road traffic accidents	3.5.2 Harmful use of alcohol, defined according to the national context as alcohol per capita consumption (aged 15 years and older) within a calendar year in litres of pure alcohol
	3.6.1 Death rate due to road traffic injuries
3.7 By 2030, ensure universal access to sexual and reproductive health-care services, including for family planning, information and education, and the integration of reproductive health into national strategies and programmes	3.7.1 Proportion of women of reproductive age (aged 15-49 years) who have their need for family planning satisfied with modern methods
	3.7.2 Adolescent birth rate (aged 10-14 years; aged 15-19 years) per 1,000 women in that age group
3.8 Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all	3.8.1 Coverage of essential health services (defined as the average coverage of essential services based on tracer interventions that include reproductive, maternal, newborn and child health, infectious diseases, non-communicable diseases and service capacity and access, among the general and the most disadvantaged population)
	3.8.2 Number of people covered by health insurance or a public health system per 1,000 population
3.9 By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination	3.9.1 Mortality rate attributed to household and ambient air pollution
	3.9.2 Mortality rate attributed to unsafe water, unsafe sanitation and lack of hygiene (exposure to unsafe Water, Sanitation and Hygiene for All (WASH) services)
	3.9.3 Mortality rate attributed to unintentional poisoning
3.a Strengthen the implementation of the World Health Organization Framework Convention on Tobacco Control in all countries, as appropriate	3.a.1 Age-standardized prevalence of current tobacco use among persons aged 15 years and older
3.b Support the research and development of vaccines and medicines for the communicable and non-communicable diseases that primarily affect developing countries, provide access to affordable essential medicines and vaccines, in accordance with the Doha Declaration on the TRIPS Agreement and Public Health, which affirms the right of developing countries to use to the full the provisions in the Agreement on Trade-Related Aspects of Intellectual Property Rights regarding flexibilities to protect public health, and, in particular, provide access to medicines for all	3.b.1 Proportion of the population with access to affordable medicines and vaccines on a sustainable basis
	3.b.2 Total net official development assistance to medical research and basic health sectors
3.c Substantially increase health financing and the recruitment, development, training and retention of the health workforce in developing countries, especially in least developed countries and small island developing States	3.c.1 Health worker density and distribution
3.d Strengthen the capacity of all countries, in particular developing countries, for early warning, risk reduction and management of national and global health risks	3.d.1 International Health Regulations (IHR) capacity and health emergency preparedness