



# JICA's Cooperation on Human Resources for Health



Japan International Cooperation Agency

## Contents

<b>Preface</b>	<b>2</b>
<b>I Country Case Story</b>	<b>3</b>
<b>1. Tanzania</b> .....	3
Strengthening leadership and ownership for HR information management .....	3
<b>2. Kenya</b> .....	8
Strengthening Provincial and district Management capacity .....	8
<b>3. Zambia</b> .....	11
HIV/AIDS Care Service Management .....	11
<b>4. Democratic Republic of Congo (DRC)</b> .....	15
Développement des Ressources Humaines pour la Santé -French-.....	15
Human Resource Development in health sector -English-.....	20
<b>5. Vietnam</b> .....	24
Training management and referral system.....	24
<b>6. El Salvador</b> .....	30
Ya no está olvidada la enfermedad de Chagas en El Salvador - Espanol - .....	30
Chagas Disease Control Project Phase 2 - English - .....	36
<b>Annex</b> .....	41
The Kampala Declaration .....	41
An Agenda for Global Action .....	43
<b>II Review of JICA's cooperation on human resources in health sector</b>	<b>44</b>
<b>1. Methodology of review</b> .....	44
<b>2. Summary</b> .....	46
<b>3. Review</b> .....	49
3-1 Regions and types of cooperation.....	49
3-2 Focus on training of HRH as a main component of the project .....	50
3-3 Administrative level of cooperation .....	55
3-4 Types of education supported by JICA .....	59
3-5 Professionals targeted for training / education.....	61
3-6 Content of support for training / education.....	63
3-7 Support for mitigation of HRH shortages .....	66
3-8 Dispatch of Japan Overseas Cooperation Volunteers (JOCVs).....	74
3-9 Training in Japan .....	76

## Preface

Human Resources for Health (HRH) is high on the global health agenda as one of the core building blocks of Health System. JICA has been working for capacity building of the human resources believing in “human resources development is the foundation of nation building”. Two years have past since Japan has committed at the Fourth Tokyo International Conference on African Development (TICAD IV) in 2008 to support training and retention of health and medical workers in Africa. This report summarizes JICA’s HRH activities and conveys voices from the field on HRH in line with the Kampala Declaration and Agenda for Global Action in 2008.

JICA’s assistance addresses the issues pertaining to the shortages in the health workforce through the following focused interventions:

- develop and increase the human resources for health (building professional training facilities, curriculum development, improving the working environment to retain the health workforce, etc);
- improve the quality of the existing health workforce through in-service training; and
- establish efficient and effective management systems (making policies and systems for the training and recruiting of health personnel, developing databases on human resources, etc).

We publicly reaffirm our commitment to tackle HRH crisis with various stakeholders and international partners.

January 2011



Kiyoshi Koderu  
Vice-President

Japan International Cooperation Agency (JICA)

## I Country Case Story

### 1. Tanzania

#### Strengthening leadership and ownership for HR information management

Project Title	Strengthening leadership and ownership for HR information management		
Project Starting Date	July 01, 2009	Project Location	Tanzania
Overall Objective(s) of Project	HRH Planning capacity is strengthened		
Applied KD/AGA	AGA2: Ensuring capacity for an informed response based on evidence and joint learning		

As in many sub-Saharan African countries, Tanzania is also facing a serious shortage of human resource for health (HRH), which is affecting the provision of health care. To address HRH crisis, Tanzanian Ministry of Health and Social Welfare (MoHSW) revised HRH Strategic Plan in 2008. The strategic plan comprises of seven strategic objectives, and one of them focuses on improving HR Planning and Policy Development Capacity (Strategic objective-01)

One of the prioritized activities of Strategic objective-01 is to establish a comprehensive Human Resource for Health Information System (HRHIS). MoHSW has been making efforts to rollout this system across the country for better HRH planning and management since 2009, and has made great achievements in a year. This is to brief you on the process of HRHIS establishment, and chief element of success by Tanzanian.

During the development process of HRH Strategic Plan, it was identified by MoHSW and HRH Strategic Plan task team members that the existing human resource for health and social welfare information system used by the different organization and institutions were not well established, and there was a lack of comprehensive and reliable system for tracking information in the country.

Available information on health care workers was scattered such as Health Management Information System (HMIS), Registrars of Professional Bodies, Report of HRH Census 2001 and so on and the information was very limited for the purposes of proper planning and decision-making. Information was collected from multiple sources; hence it was often associated with difficulties in coordination and reliability of HR data<sup>1</sup>. Moreover, HR data collection from private sector, limited capacity of HR data analysis for HR demands, projection and forecast were also identified as challenges.

Due to the above-mentioned situation, HR information management was prioritized for effective planning, production, recruitment and retention of HRH. Therefore, establishment of a comprehensive human resource information system was chosen as one of the key milestones and became one of the priority activities of the HRH Strategic Plan, Strategic objective -01.

To develop comprehensive and effective HRHIS, MoHSW, with technical support from HRH Planning Advisor of Japan International Cooperation Agency (JICA), firstly analyzed the current situation of human resource information system in public and private sector. The analysis revealed that several interventions for development of human resource information system were ongoing in different ministries and organizations. However, none of them was effective enough for meeting the needs of health sector, or system application was not suitable for the country. Another issue that was revealed was that there are no or weak coordination of these systems, and every system developer was focusing on adoption of system by MoHSW, and piloted the system without consensus among stakeholders. Moreover, MoHSW realized from the experiences of neighboring countries that human resource information system that is introduced by outsider is difficult to maintain due to costs and technical issues, and it does not seem to be effectively utilized. Another issue is that introduction of information system by the outsiders leads to the perfunctory involvement of MoHSW, and this does not nurture an ownership and leadership needed for establishment and roll out of a human resource information system. This will result in the poor sustainability of HRIS.

Therefore, group of 30 people from Department of Human Resource Development (DHR), Department of Policy and Planning (DPP) of MoHSW, and HRH experts from Tanzanian institutions had series of meeting and made a decision to establish HRHIS with available

---

<sup>1</sup> Human Resource For Health Strategic Plan 2008-2013, Ministry of Health and Social Welfare, United Republic of Tanzania

resources in Tanzania. The system was named as “HRH Information system (HRHIS)<sup>2</sup>” and it is developed, owned, and managed by Tanzanians.

First step was to document “HRHIS Framework”, which guides all stakeholders to coordinate development of the system under the leadership of MoHSW. The Environment for HR information system development, outline of HRHIS, collected data elements and collection method, and M&E mechanism were all documented in the Framework.

Second step was to develop HRHIS application with IT experts from national university and it was piloted in one region and its district health authorities. University of Dar es Salaam, Department of Computer Sciences (UDSM-DCS) was identified as system developer since UDSM-DCS was the system developer of District Health Information System (DHIS),



which MoHSW is planning to rollout for strengthening of Health Management Information System (HMIS), and HRHIS is recognized as a part of DHIS module. Development of two systems by the same institution will make the system communication very easy. Furthermore, integrated development of the systems will contribute to cost effectiveness, efficient maintenance of the systems, and easy upgrading of systems in the future. Therefore, HRHIS system development, operational training of HRHIS for regions and districts, update of HRHIS application has been done by UDSM-DCS. Furthermore, officials from MoHSW visited the pilot region and districts to explain the importance of HRHIS and encourage them to accelerate HR data entry, which also accelerated the process.

Third step was to rollout HRHIS to the rest of the country. Currently, HRHIS has been rolled out to 5 (out of 21) regions, 44 (out of 133) districts and 8 (out of 8) national, referral and specialized hospitals with close follow-up by MoHSW and IT specialists from UDSM-DCS.

Regional Medical Officers are well informed before rolling out of the system and thus

---

<sup>2</sup> More details, visit <http://en.wikipedia.org/wiki/HRHIS>

provides positive support for arranging training venue, computer delivery to districts and transportation for monitoring of districts.

HRHIS is collecting HR data not only from public health facilities but also from private health facilities, as Council Health Management Teams (CHMTs) are responsible to have information from both sectors. However, joint monitoring team from MoHSW and UDSM-DCS revealed that HR data collection from private sector is not easy at district level. Therefore, MoHSW communicated with Faith Based Organization and private health facility association such as Christian Social Service Commission and Association of Private Hospitals in Tanzania to guide health facilities under their group to submit HR data to CHMTs, which turned out to get successful results.

According to the MoHSW plan, HRHIS will be rolled out to all regions and districts by the end of 2012.

In the past one-year, all progresses were reported to MoHSW management and shared with stakeholders by using existing coordination mechanism; HRH working group under SWAp technical committee for harmonization and coordination of development partners' support.

According to the speed of rollout, data collection rate, and feedback from users, this country-led approach seems to be very effective in nurturing ownership and leadership at all levels. This also leads to ensuring sustainability of the system.

MoHSW and UDSM-DCS jointly conduct supportive supervision to all hospitals, regions and districts where HRHIS is installed. It is reported from HRHIS supportive supervision teams that many institutions, regions and districts have almost completed HR data entry, and are happy to use the system because of its easy operation and the several functions that will help their day-to-day management of HRH.

In case of the Muhimbili National Hospital, which is the top national referral hospital in the country, the hospital had a HR information system that was procured from a local IT agent. However, since the system didn't have a function of creating a report in a set format, the hospital staffs used to create HR related reports manually using HR raw data from the system, which was time consuming and required a lot of effort. After MoHSW introduced HRHIS, HR officer of Muhimbili National Hospital realized that HRHIS is system

that saves the hospital a lot of time and effort, as it is easy to operate and has variety of reporting functions that the hospital needs for planning and routine management of HRH. Thus, the hospital made decision to introduce and utilize HRHIS.

Assistant Director, Department of Human Resource Development, MoHSW, who manages HRHIS, strongly and proudly mentions that “HRHIS” is the only system for Tanzanian health sector that is developed, operated and managed by Tanzanian, and we will rollout the system all over the country to make the situation better.



## 2. Kenya

### Strengthening Provincial and district Management capacity

Project Title	<b>Strengthening Management for Health in Nyanza Province</b>		
Project Duration	July 2009- July 2013	Project Location	Kisumu, Kenya
Overall Objective of Project	Individual capacity of health managers and institutional capacity of health management teams (Provincial and district levels) are improved in Nyanza Province		
Applied KD/AGA	AGA3: Scaling up health worker education and training		

#### **HOW IT WAS BEFORE**

We thought we were doing it right. Little did we know that we were not quite aware of our situation? We were using so many efforts (Muscle), without **“MIND SET CHANGE”**. How I wish we knew the concept of **“MIND OVER MUSCLE”** earlier. We were operating using the National vision and mission, non- tailored to our team. We had not realized that it was our role to develop our own team’s vision and mission through participation, let it be known to all our members, so that we become more focused. We had limited knowledge on strategic thinking and operating using the National strategic plan which is quite broad. We have many policy documents and guidelines, some of which managers and workers are not aware of; retrieval not easily due to lack of resource corner or centre. We had not identified how to mature synergy in approach to service delivery using the available resources for greater achievements. This is because the programme managers had not seen areas of convergence – ***Strategic thinking and critical analysis of planning and operations; individual and group responsibility***. We also had inadequacy in ICT use. As a management team, we are charged with conducting support supervision to the district level managers and other levels. We did not have a management support supervision checklist. What we were using had omitted key management support areas and had more of technical operations details. So we were missing on what we could do to make health providers deliver services towards achieving desired goals. To gain clients through

demand creation has always been our desire using possible avenues including use of Information, Education and Communication (IEC) materials. However we had inadequate capacity in the development process and appropriate use of IEC materials locally. We had no means of assessing clients' satisfaction with our services (Customer Care).

### **HOW I HAVE CHANGED**

***I have learnt that, I should not wait for problems to occur to work on them, but I should always mitigate it not to happen, or stop its occurrence by finding the cause. If I identified when it has occurred, then I should work on it as I investigate the root cause and work to stop it from there. (A lesson I learnt from a Scenario by Dr. Sugishita San of Drifting Babies' rescue). One can only do so much, not the same thing forever without positive change. I must stop to think before action. I have also been challenged by big changes that have occurred due to initiatives of individuals who are committed, example –Public Health Nurses in Japan amongst others, why not me? I believe I can. I will not give up. I have gained a drive.***

### **OUR TEAM**



Through JICA Technical support by the experts (Chief Adviser; Dr. Sugishita San, Human Resource Development Adviser; Toda San, Advocacy and Communication Adviser; Murakami San, Field Advisor; Nagi san and the JICA Volunteers), we have learnt a lot through interactions, observations and trainings. We have achieved the following: Conducted Situation analysis as Teams – PHMT, Kisumu West DHMT, Siaya DHMT and Ugenya to

follow. We identified core competencies required for our teams and type of trainings needed. We identified partners in training and capacity building; we formed two working groups for training and IEC development/ dissemination. We jointly developed training manuals/materials under the leadership and technical assistance of the JICA experts and the contracted consultants. We have been trained using these materials on: 1) *Leadership, Management and Governance*; 2) *Strategic Thinking and Management*; 3) *Health Policy Management*; 4) *Basic Health Promotion*; 5) *Supportive Supervision, Mentoring and Coaching*; 6) *Evidence Based Practice and Information Management*; and 6) *Basic and Advanced IT Skills*.

The PHMT had Capacity building planning with full participation using PCM process and Project Development Matrix (PDM) by JICA experts. We have done self-assessment on performance on competency areas and scored on spider web chart. We have resolution matrix for improving our performances. We now have PHMT vision & mission; we have suggestion box for customers feedback; we are strategically planning using bottleneck analysis approach; we are establishing resource corner and materials are already gathered; many members are now using improved ICT skills, we have some locally developed IEC materials and other changes in progress. In all, my emphasis is that we are now clearer on where we are coming from and where we are going than before.

We have also had team members visiting Japan to learn the ways of approach to Health Systems Management and development issues. I benefited on this visit to Japan in addition to the trainings I have attended on Health systems strengthening within the project. I am a disciple and advocate for CHANGE. Change begins with me. I have given my team feedback and shared the plan of action.

### **CONCLUSION**

We have been moving, our speed has been slow but now accelerated carefully. We are working to move faster and scale up. Soon and very soon, whoever will be looking for us wherever they knew we were in terms of performance in the country, may not find us. It will be easier finding us from in front than from the back in the national performance list. Ours for the future is POSITIVE MIND SET CHANGE. We are hoping to be a MODEL for KENYA through this support, a province with a name. We have started to show case.

WE THANK JAPAN GOVERNMENT FOR THE SUPPORT.



### 3. Zambia

#### HIV/AIDS Care Service Management

Project Title	Scaling up of Quality HIV and AIDS Care Service Management (SHIMA)		
Project Duration	Nov. 2009- Nov. 2014	Project Location	Zambia
Overall Objective of Project	Management capacities for sustainable service provision are improved at all levels for the expansion of quality ART services in rural areas.		
Applied KD/AGA	AGA3: Scaling up health worker education and training		

It was a very hot summer day in Zambia and apparently I was at one of the rural health centres, Lungobe, located in Mumbwa district, Central province. Mumbwa district is 150km away from Lusaka, the capital of Zambia.

I was standing at a distant near a shade and observing the activities of the health centre. Everyone there seemed so busy running from all directions as if preparing



for something very special. Some people were standing in a queue while others were sitting on a bench. They looked so restless. The man in a white coat was running up and down at the health centre in a panic and trying to attend to the people waiting for the services. He seemed so tense and tired. He invited some people to a private room and later he came out and rushed to another room with some medications. He slowly wiped the sweat from his forehead and looked up to the waiting people as he calmly shouted, “Next!!”

A lot of questions were raised in my mind. I walked up to a man and introduced myself thereafter I asked in a soft voice.

“What is going on here? Do you have anything special today?”

He smiled at me and calmly explained.

“No. This is our health centre. That man in a white coat is our clinical officer, Mr. Phiri. Those people sitting there are all patients waiting for different services, such as ANC, under five, general outpatient and HIV services, among others. This is the normal situation here.”

Then he now introduced himself.

“My name is George Zulu, I am a HIV treatment supporter at this rural health centre. I am here today to help and support the services here and health centre staff. As you might have already been aware, one of the great challenges in rural settings is the shortage of health staff in rural health centres. Please come with me and let me take you around the health centre. So I can show you what is going on here...”

I walked in total silence beside him as he took me around the centre.

“I started to work as a HIV treatment supporter here because I wanted to play a role in my community by trying to help improve HIV services here. I also have a heart to help others.”



He said after a few seconds of walking.

“I am coming here to help the centre with the basic things like weighing patients, making appointments for patients, recording data in registers, filling patient files, offering health education and also sensitizing the communities.”

I eagerly asked to him.

“How did you become a treatment supporter at this health centre?”

He responded,

“Before I came to Mumbwa District, I lived in Luanshya District on the Copperbelt Province, which is my place of birth. I completed my high school there and went further to attain a diploma in electrical. After that, I worked for Ministry of Defence in Lusaka as an electrician for twenty years, and then moved to one private company in Mumbwa district as an electrician working for five years until I retired. Finally I decided to settle down in Mumbwa district. Although I still do a part time job as an electrician, it’s not so busy that I start to spend a time at this health centre to support their services from Monday to Thursday. When I started my work at this health centre, I was recommended by our clinical officer, Mr. Phiri to attend certain trainings supported by JICA and Mumbwa District

Medical Office. I have attended several training courses; PMTCT, Lay Counsellor, Community Based Adherence Counseling in HIV/AIDS Services and Psychosocial Counseling.”

We then came across a room where many posters were stuck on the wall. He went on explaining some of the writings on the posters.

“This is the number of staff in this centre. We have total 3 staff, one clinical officer, one nurse and one information officer. They are covering 7,500 residents in this area. Due to the shortage of staff, Mumbwa District Medical Office thought of introducing some training courses for community people to help in different capacities at our health centres as one way to overcome this challenge. Most of these trainings were successfully achieved and motivated many participants from our communities. More than 250 community people have been trained and they are assisting health services in different health centres. We are trained as HIV treatment supporters, but we are supporting not only HIV services but also other services at the health centre like antenatal, under five, health education, and also sometimes we offer home based care for some clients who cannot come to the centre. I feel like improving the health services here and health status of the people in the community.”

He then took his attention from the posters on the wall and looked at me, then said, “Our biggest challenge as treatment supporters is that we are not on any payroll or allowances for all these activities we help with. Other kinds of community health workers also have the same problem. We are actually doing all these activities on voluntary basis and spending most of our time on working at the health centre. If we stopped our activities, the services in this health centre would stop and it would affect many clients in this community. Both our life and community health are important. We cannot choose either of them.”

Then I asked in a sympathetic voice, “So how do you and the other community health workers manage to keep their life and what still motivates you to continue working as treatment supporters? “

He answered,

“Usually some are doing part time jobs and the others are farming or fishing for their life. In my case, I still depend on my skills as an electrician. However it’s a challenge that we



cannot get enough salary to maintain our good life because we spend the most of our time at the health centre. As for the motivation, I should say, firstly it's our commitment to help others. Secondly, we are so grateful for being trained and being able to put all the things we've learnt into the practice."

I was really touched with Mr. Zulu's story, but before I could let him get back to his work, I need to ask him an important question.

"Mr. Zulu, if I was a messenger of good will, what message would you like me to send to the world out on your behalf?"

He smiled with confidence as though the message he was about to give had already been delivered. He began to talk,

"Firstly I would like to thank and congratulate all the community health workers for working so hard despite our many challenges. Secondly I would like to thank all our sponsors for training us and giving us the skills to help others. Lastly I would like to say that in our setup with the great shortage of the staff in Zambia, volunteer workers are contributing to a lot of health workforce and health services. We hope that our contributions could be recognized, and more supportive environments to help us sustain ourselves could be considered."

I wanted to continue my conversation with Mr. Zulu, but I had to let him get back to his work. I thanked Mr. Zulu for all the information he shared with me, and I promised him I would share his story with as many people as possible.

The same things happened in any rural health centres in Zambia. The population in Mumbwa district is around 230,000 which are covered by only 3 medical doctors. Increasing the number of qualified health staffs, like doctors and nurses, is very important, but we also have to consider how to deal with unqualified health volunteers who are essential to sustain the health services.



## 4. Democratic Republic of Congo (DRC)

### Développement des Ressources Humaines pour la Santé -French-

Titre du projet	Projet d'Appui au Développement des Ressources Humaines pour la Santé		
Durée	Novembre 2010 - Octobre 2013	Lieu	Kinsasha
Objectif du Projet	Les capacités de la Direction des Ressources Humaines pour exécuter le Plan National de Développement des Ressources Humaines pour la Santé sont renforcés		
DK/PAM appliqué	PAM1. Constituer le leadership national et mondial pour trouver des réponses aux questions concernant les personnels de santé		

En juin 2007, la Conférence de Douala portant sur « les ressources humaines pour la santé en Afrique : expériences, défis et réalités » est un point de repère qui mérite d'être mentionné dans le processus du développement des ressources humaines pour la santé en République démocratique du Congo. C'est à l'issue de ce cadre d'échanges régional et international que le pays va concrètement se doter d'un plan d'action clair et précis en la matière. C'est ici que va réellement naître une dynamique sur le plan national. Il s'agissait d'une mobilisation pour l'élaboration d'un plan national stratégique des Ressources Humaines pour la santé (RHS). Cet atelier a permis de concrétiser les desideratas des recommandations de la journée mondiale de la santé 2006. Dans le même élan, il faut aussi citer la perception de l'impérieuse nécessité de la mise en place d'un comité multisectoriel pour la promotion des RHS. C'est durant cette période que la révision et l'harmonisation des curricula de formation des professionnels de santé au niveau secondaire va être effective dans sa mise en œuvre, spécialement dans la formation des cadres de niveau intermédiaire, après plusieurs années d'analyse situationnelle.



La tenue du premier forum mondial sur les ressources humaines pour la santé du 2 au 7



mars 2008 en Ouganda, assorti de la Déclaration de Kampala et d'un programme pour une action mondiale, a donné une nouvelle impulsion, boostée plus tard par la conférence de Cotonou en septembre de la même année, qui traitait des enjeux et des perspectives, au regard du retard accumulé dans ce domaine par les pays francophones en général et particulièrement dans notre pays. Pour ce faire, il a été élaboré un mini plan d'action des RHS comptant notamment sur l'appui tant technique que financier de la Banque Mondiale, l'OMS, Alliance Mondiale pour les Personnels de Sante (l'AMPS) et d'autres organismes. En fait, ces forums de mise en commun des expériences des succès et des échecs des efforts consentis face à la problématique des ressources humaines pour la santé ont permis au pays de passer à l'action à une vitesse supérieure.

En effet, l'une des difficultés majeures, qu'éprouvait la RDC et fustigée par le Programme pour une action mondiale de Kampala, demeurait le manque criant des données de base, nécessaires à une meilleure planification et à une gestion efficace des personnels de santé. C'est dans ce sens qu'une phase clé dans le processus de la constitution de données de base des RHS a été franchie en 2009 avec l'appui de l'AMPS et qui a actuellement abouti à la dotation pour la première fois au pays d'un annuaire national des RHS. Parmi les étapes parcourues, il sied de mentionner d'abord l'atelier qui a réuni toutes les parties prenantes impliquées dans la gestion, notamment les ministères de la fonction publique, de l'enseignement supérieur et universitaire et de la santé, les partenaires privés, ainsi que les ordres et associations professionnels.

Ces échanges ont permis d'identifier 13 catégories des professionnels de santé existants sur toute l'étendue nationale. Il s'en est suivie une mission à l'intérieur du pays pour collecter les informations sur les personnels de santé exerçant dans le secteur public. Puis une présentation des données spécifiées par provinces et par catégories professionnelles a été élaborée. Il faudrait enfin relever, d'une part, que cette descente sur le terrain a révélé, en termes de diagnostic, plusieurs faiblesses, notamment : une cassure entre le niveau national et les provinces ; une répartition inéquitable en personnel de santé entre les milieux ruraux et les milieux urbains avec inexistence de quelques catégories professionnelles dans certaines provinces ; une pléthore des personnels administratifs purs sans compétences particulières (soit 40% de personnels) ; les personnels infirmiers constituant 40% des effectifs bien au-delà des normes ; les informations sur les ressources humaines ne sont pas gérées suivant le sexe, le niveau d'études ; le manque de matériels informatique ; personnels en charge de RHS ne sont pas recyclés.

D'autre part, cette approche de proximité a eu un impact positif à travers la motivation

suscitée dans le chef de ceux qui gèrent les structures provinciales en charge des ressources humaines pour la santé, du fait de l'intérêt porté aux RHS jusqu'alors négligées et abandonnées à elles-mêmes.

Dans le même souci et en vue de contribuer à assurer des investissements supplémentaires et plus productifs en faveur des personnels de santé en RDC, nous avons défini en juillet 2008 en accord avec les experts japonais les grands axes de la coopération bilatérale japonaise (JICA) dans le secteur de la santé orientés vers le développement des RHS et alignés sur les priorités stratégiques nationales contribuant à un soutien intégré du secteur sanitaire. L'orientation de ces axes sur les RHS est historiquement unique en son genre et une première dans le cadre de la coopération dans le secteur de la santé de notre pays qui est, du reste, en pleine restructuration.

Ces axes sont le renforcement de la politique nationale de développement des ressources humaines dans le secteur de la Santé ; l'amélioration de la qualité de l'enseignement de base ; et l'amélioration de l'organisation de la formation continue. Cet appui de la JICA se traduit à travers plusieurs projets en cours d'exécution et l'apport des experts japonais auprès du ministère de la santé publique. Parmi ces projets, nous pouvons citer : le projet d'appui au développement des RHS, le projet de réhabilitation de l'Institut d'Enseignement Médical de Kinshasa (IEMK) comme école pilote nationale de la formation des cadres de niveau intermédiaire, la dotation des équipements aux Cliniques universitaires de Kinshasa, une grande institution de formation, des stages, de formation continue et des soins de niveau tertiaire. Le projet d'appui au développement des RHS comprend notamment le renforcement des capacités institutionnelles de la direction des ressources humaines, la mise en place du système de gestion de l'information sur les RHS et l'élaboration du plan national de développement des ressources humaines pour la santé (PNDRHS) 2011-2015 d'ici décembre 2010.

L'élaboration de ce plan est sous la coordination d'un comité multisectoriel, le comité national de pilotage du secteur de la santé (CNP-SS), institutionnalisé au mois de novembre 2009 comme une des réponses à la première stratégie du programme pour une action mondiale de Kampala, qui est de constituer le leadership national pour trouver des réponses aux questions concernant les personnels de santé. Le CNP-SS est composé entre autres d'une commission technique en charge des RHS et du renforcement des capacités responsable du processus du développement des RHS en RDC. Cette commission rassemble toutes les parties prenantes bien identifiées (acteurs publics, privés, société

civile et partenaires internationaux) et impliquées dans l'élaboration, la mise en œuvre, le suivi et l'évaluation du PNDRHS. D'ores et déjà, quelques activités importantes réalisées sont mises à contribution pour l'élaboration de ce plan.

Il s'agit principalement de la formulation d'une politique de développement des RHS qui reste à être traduite sous forme d'un plan, l'état des lieux des instituts techniques médicaux (dépendant du ministère de la santé) en novembre 2009, l'audit organisationnel et étude de viabilité des établissements des filières d'études médicales (dépendant du ministère de l'enseignement supérieur et universitaire) de septembre 2010 avec l'appui de la JICA. Il est également opportun de citer ici deux autres activités appuyées par la JICA. Il s'agit en premier lieu de l'atelier national de réflexion sur l'élaboration du PNDRHS tenu au mois de juillet 2010, d'où est sortie une ossature du plan suivant une approche participative et une démarche de large concertation avec les responsables provinciaux en charge des RHS et d'autres parties prenantes. En second lieu, il sied de mentionner le recensement complémentaire des personnels de santé réalisé au mois de septembre 2010 visant le secteur privé, paraétatique, la police et l'armée. Cette étude complémentaire dont les données sont en cours d'analyse va aussi permettre de confronter et actualiser les informations recueillies pour le secteur public en 2009.

Dans le même cadre, la Conférence de Cotonou tenue du 6 au 9 octobre 2010 relative aux grandes lignes sur l'observatoire national des RHS a conforté le pays dans l'option pratique prise en ce qui concerne la constitution des données factuelles au lendemain de la Déclaration Kampala. En effet, l'observatoire, en tant qu'outil d'appui du système d'information sur les RHS, pourra répondre un double besoin : d'un côté, celui de disposer des informations fiables et pertinentes sur les personnels de santé et les rendre facilement accessibles à tous pour faciliter la prise de décisions au profit du développement des RHS au pays ; et de l'autre côté, celui de rendre compte rapidement la situation factuelle des RHS et son évolution sur le plan national. C'est ainsi que le pays s'est impliqué, avec l'appui de l'OMS, à mettre en place l'ONRHS. Déjà, au cours du mois de juin 2010, une première réunion de sensibilisation élargie à toutes les parties prenantes a été tenue et a suscité ardeur et engagement des uns et des autres.

La fidélisation du personnel de santé en RDC n'est pas encore acquise à ce jour. Les stratégies pour l'appuyer ne sont pas encore définies. La rétention de personnel à leur poste est difficile. Aux personnels de santé reste jusqu'à ce jour insuffisant. Ceci est notamment dû du fait qu'il y a l'absence des avantages tant financiers que non financiers

attractifs capables de produire motivation et efficacité de ce personnel, avec des conséquences regrettables sur la qualité des soins offerts à la population. Malgré tout, quelques innovations méritent d'être mentionnées. Il s'agit de la signature des contrats de performance avec certaines équipes cadres des zones de santé en 2008. Cette démarche suscite beaucoup d'espoir dans la mesure où elle pourrait avoir un impact positif sur le personnel suivant sa généralisation. Et, dans le cadre de la mise en place d'un environnement de travail favorable et sécurisé, l'approche 5S de la gestion de la qualité totale intégrée par la coopération japonaise pourrait également être signalée.

Beaucoup de progrès restent encore à accomplir dans le processus de développement des ressources humaines pour la santé en RDC sur la voie des OMD et au-delà, mais nous pensons être sur la bonne voie de les réaliser pourvu que l'accompagnement d'un appui substantiel tant financier que technique dans le domaine puisse demeurer effectif et efficace dans cette marche. C'est dans cette perspective que nous pensons disposer au secteur de santé de notre pays d'un personnel de santé compétent, performant, en quantité suffisante et équitablement réparti pour une offre des prestations de soins de santé de qualité.

## Human Resource Development in health sector -English-

Project Title	Project for Human Resource Development in health sector of DRC		
Project Duration	November 2011- November 2013	Project Location	Kinsasha
Overall Objective of Project	The capacity of Human Resource Department to implement National Plan of Human Resources are strengthened		
Applied KD/AGA	AGA1. Building coherent national and global leadership for health workforce solutions		

The Douala Conference on « human resources for health in Africa: experiences, challenges and realities » held in June 2007 was a significant landmark for the process of developing human resources for health in the Democratic Republic of Congo. At the end of this regional conference, participating countries will concretely require a clear and precise Plan of Action in this field. It created a momentum



for developing a national plan for HRH. This workshop served to realize the wills and recommendations expressed during the 2006 world health day. At the same time, the urgent need for the establishment of a multi-sectional committee for the promotion of human resource development in health sector was recognized. It is during this period that the review and harmonization of the training curricula for health professionals at the secondary level will be effective in its implementation, especially in the training of health professionals at the intermediary level, after several years of situational analysis.

The first Global Forum on Human Resources for Health held on 2-7 March 2008 in Uganda was completed with the Kampala Declaration and Agenda for Global Action. It has given a new momentum, boosted later by the Cotonou conference in September of the same year, which addressed the issues and prospects with regard to delay accumulated in this field by French-speaking countries in general, and in our country in particular. To respond them, a mini action plan for HRH has been developed especially with technical and financial support of the World Bank, WHO, Global Health Workforce Alliance (GHWA) and other agencies. In fact, these forums of sharing experiences on successes and failures in the efforts to address issues of human resources for health have enabled the country to take

action quickly.

Indeed, despite the Kampala Declaration and Agenda for Global Action, one of the major difficulties that DRC had to face has been the total absence of basic data, required for a better planning and for efficient management of health personnel. In that sense, a key phase in the process of constructing basic data on HRH has been surmounted in 2009 with the support of GHWA which has for the first time in the country, lead to the production of a national HRH directory. During the production process, it is worth mentioning first of all the workshop that gathered all the partners involved in management, especially the Ministries of Civil Service, Ministry of Higher and University Education, and Ministry of Public Health, private partners, as well as the professional associations.

These exchanges of views have allowed identifying 13 categories of existing health professionals over the whole national territory. It was followed by a series of missions in the country to collect information on medical personnel working in the public sector. Afterwards a presentation of specific data by province and by professional category was developed. Finally it should be noted, on the other hand, that data collection in the field has revealed, for the diagnosis terms, several weaknesses, especially: a gap between the national level and provinces level; an inequitable distribution of health professionals between rural and urban areas with the absence of some professional categories in certain provinces; an overabundance of purely administrative personnel without any specific competence (40% of personnel); the nursing staff constituting 40% of the required level, well beyond the standards; information regarding human resources are not disaggregated by the gender and level of studies; lack of computer material; personnel in charge of HRH without refresher courses.

On the other hand, this proximity approach has had a positive impact on those who manage the provincial structures in charge of human resources for health, because of the increased interest given to HRH, which had long been neglected or abandoned up to now.

With these recognized problems and for contributing to secure additional and more productive investments for health professionals in DRC, we have drawn a bilateral agreement with the Japan International Cooperation Agency (JICA) in the health sector in July 2008. The initiative was aimed at the development of HRH and aligned with national strategic priorities for an integrated support in the health sector. The orientation of these activities on HRH is historically unique and the first in the scope of cooperation in the health sector in our country which is, moreover, in the middle of restructuring.

These activities are the reinforcement of the national policy for the development of human resources in the health sector; improvement of the quality of basic education; and improvement of the organization of continuous professional training. This support is given by JICA via several projects and the Japanese experts to the Ministry of Public Health. Key projects supported by JICA include a project for the development of HRH, the project for rehabilitation of the Institut d'Enseignement Mécidial de Kinshasa (IEMK) as a national pilot school for health professionals training at intermediate level, the provision of equipments to the University Clinics of Kinshasa, training courses for continuous training tertiary level care.

The project for the development of HRH includes, among others, the reinforcement of institutional capacities of the management of human resources, the installation of an information management system for HRH, and the elaboration of the National Development Plan of Human Resources for Health (NDPHRH) 2011-2015 by December 2010.

This plan is elaborated under the coordination of a multi-sectional committee, the National Pilot Committee of the Health Sector (NPC-HS), institutionalized in November 2009, as one of the responses to the first strategy of the Kampala Declaration and Agenda for Global Action whose aim is to create the national leadership to find answers to issues regarding health personnel. The NPC-HS is composed by, among others, a technical commission in charge of HRH and strengthening capacities responsible for the development process of HRH in DRC. This committee gathers all identified partners (public and private actors, civil society and international partners) and is implicated in the development, the implementation, the monitoring and the evaluation of the NDPHRH. Some important activities already carried out are contributing to the elaboration of this plan.

It mainly concerns the formulation of a development policy of the HRH which remains to be put under the form of a plan, the inventory of medical technical institutions (affiliated to the Ministry of Public Health) in November 2009, the organizational audit and the study of the viability of the establishment channels of medical studies (affiliated to the Ministry of Higher and University Education) in September 2010 with the JICA assistance. It is also appropriate to quote two other activities supported by JICA. First of all, there is the national reflection workshop on the elaboration of the NDPHRH which was held in July

2010. Of which the framework of a plan based on a participative approach and of widespread consultations step with those responsible at the provincial level in charge of HRH and other parties concerned. Secondly, it is convenient to mention the additional census of health personnel carried out in September 2010 covering the private, parastatal, police and army sectors. This additional study, whose data is being analyzed, will also allow comparing and to update the information collected for the public sector in 2009.

In the Cotonou Conference held from 6 to 9 October 2010 concerning the broad outline of the national observatory on HRH has comforted countries in practical option to set up the data to adopt particular action after the Kampala Declaration. Indeed, the observatory as supporting tool of information system of HRH respond to a double need: first, holding reliable information pertinent to health personnel who could be made easily accessible to everybody in order to facilitate the decision-making to the benefit of the HRH development in the country; and second, quickly reporting the factual situation of HRH and its evolution on the national level. This is how the country is involved, with the assistance of WHO, to establish the ONRHS. The first public awareness meeting was already held in June 2010 and has raised enthusiasm and engagement by each of the participants.

The development of loyalty of health professionals in DRC has not been acquired and the support strategies have not been defined yet. Retention of the personnel at their post is difficult and insufficient until now. This due to the lack of financial as well as non financial attractive benefits allowing disposing of motivated and effectiveness for the personnel, with regrettable consequences on the quality of care offered to the population. Nevertheless, it is worth to mention some innovations. Certain executive teams of the health sector signed performance contracts in 2008. This approach is giving much hope since it may have a positive impact on the personnel once it becomes widespread. In addition, Japanese cooperation on 5S (Sort, Set, Shine, Standardize, Sustain) as total quality management approach for the installation of a favorable and secured work environment should also be pointed out.

A lot more to be accomplished in the HRH development process in DRC towards the MDGs and beyond, but we believe that we can be on the right track if we have financial and technical support effectively and efficiently. We believe in this perspective that medical personnel, in our country are able to have competency and high performance and to offer quality health care services, in sufficient quantity and equally.



## 5. Vietnam

### Training management and referral system

Project Title	DOHA activities in Hoa Binh Province, -strengthened capacity of training management and referral system-		
Project Starting Date	Dec 2004- Dec 2009	Project Location	Hoa Binh Province, in Vietnam”
Overall Objective(s) of Project	Medical system in Hoa Binh Province is strengthened through establishment of DOHA and patient referral system.		
Applied KD/AGA	AGA3: Scaling up health worker education and training		

#### Background

Elements of market forces and private enterprise were introduced since the implementation of the Doi Moi policy in 1986. Various reforms in health sector such as privatization of medical service and introduction of a health insurance system have greatly contributed to the improvement of health indicators in the health service sector in Vietnam. However, there are expanding gaps between rich and poor, and between rural and urban populations. Especially many health related issues of the mountainous area of northern part of country, where Hoa Binh Province is located, are still far behind. Weak referral system and low quality of medical service of provincial and district hospitals caused concentration of patient in central hospitals in urban area.

The demand for quantity and quality of health human resources in the whole country still has been remaining as a big challenge. Improvement of the healthcare service quality at all levels is one of the main targets of the health sector that defines in the Strategy for Socio-Economic Development in the Period 2001-2010, the Vietnam’s national development plan. In addition, the Health Care and Protection Strategy for Period of 2001-2010, the national health strategy, sets a few objective goals, such as enhancing development of human resources in the medical services system and strengthening the organizational system of the health sector.

### Overview of JICA project

“The JICA project for Strengthening Health Services Provision in Hoa Binh Province” in 2004-2009, had supported to improve provincial health system through combination of following four components: 1, Re- training of medical care workers by established network of training units so called as Direction Office of Health Care Activity (DOHA) Network in the whole province 2, Reestablishment of local referral system in order to reduce bypass referral cases from district to national hospitals. 3, Enhancement of quality of clinical activity in Hoa Binh General Provincial Hospital (HGH) and 4, Capacity development of Hoa Binh Provincial Department of Health (DOH) for better management of health services. Main targets are one provincial hospital, eleven district hospitals and Hoa Binh Provincial Department of Health.

Firstly, the JICA project supported the DOH to make it enable to take a leading role in managing health sectors’ resources in the province for adequate allocation. Then, the JICA project provided technical supports for training management and patient’s referral system. Effective training management aims of building capacity of human resources, while the referral system enhances the quality of patient transfer and information. Through these activities, the quality of health services to the patients has been improved.



### Establishment of DOHA network

*“To be a reliable provincial hospital for district hospitals” “To be able to conduct trainings and provide technical guidance for district hospitals”*

In Vietnam, Ministry of Health has implemented DOHA policy. DOHA activity plays an important role for the effective technical transfer through training and support from higher to lower level of health care facilities, from central to province and from province to district. However, before the JICA project started, training for district hospitals had been conducted by central hospitals due to lack of necessary resources and training experiences in HGH.

At the beginning of the project, in order *“to be a reliable provincial hospital for district hospitals”* and *“to be able to conduct trainings and provide technical guidance for district hospitals by themselves”*, capacity development of HGH and DOH staffs were mainly focused. In parallel with the trainings in the health care institutions at central level,

organization for each activity was also developed. Especially DOHA network was systematized by the initiative of newly established DOHA department in HGH. Two permanent staffs and six part time members were assigned in DOHA department which takes responsibilities for training and patient referral activities. They play the role as “bridge” between “DOHA branch” in each clinical department of HGH and “DOHA sub-committee” in each district hospital. “DOHA branch” of HGH comprised key members who have high-level professional skills in each department; one doctor and one nurse. “DOHA sub-committee” of each district hospital consisted of the Director, chief of the General Planning Department (GPD) and GPD staff.

#### Enhancement of relationship between HGH and district hospitals through referral meeting

*“What is the necessary training for district hospitals?” “What is the expected role of HGH for the district hospitals?”*



Monthly referral meeting among HGH and district hospitals have been held with two main objectives; to review diagnoses made by doctors in DHs and to share knowledge, skills and issues related to specialty and policies of the health sector. Besides the main contents of the meeting such as Referral information sharing and Referral case review, HGH and district hospitals have started to discuss *“What is the expected role of HGH for the district hospitals?”* and vice versa. It means the new way of cooperation and style of shared responsibility was generated instead of conventional way “from top to down instruction”. It also brings a lot of benefit for the district hospitals for example, *“One district hospital has its own limits to learn many things. The meeting gives all the hospitals in Hoa Binh province a chance to get together and share their experiences and problems”* commented by Dr. Nguyen Quang Sinh of Kim Boi District Hospital. Moreover, training needs in specialty and skills for medical staffs with the analysis and experiences were drawn from collected referral data. Based on the concept of training management cycle, HGH started to assess *“the actual needs of training for districts hospitals”*.

Strengthened training management capacity in HGH and positive change in attitude toward training

*“Attitude toward training has greatly changed”, “Trainee-centered Training”,*

*“Training: Participation, more than attendance”, “ I learned exactly what I wanted to learn and started using the skills learned soon after I came back to my hospital.”*

It is essential for higher level hospitals to have enough capability to manage and conduct effective training activities for lower level hospitals. Before the project started, capacity of training management was not sufficient as the present system. For instance, detailed information of training wasn't accumulated and off-post training evaluation totally depended on each department' policy. For this problem, numbers of training courses on management and facilitating skills were provided for the staff of the DOHA department to get equipped with necessary knowledge and skills. Standardized training procedure was shared among HGH, DOH and district hospitals. Developed “guideline of DOHA Activities in Hoa Binh Province” is an effective supportive tool.

Actually 14 steps of training management cycle was introduced. The steps are as follows; 1.Needs survey, 2.Making Training List/Plan, 3.Needs Matching Survey, 4.Approval of training, 5.Submission of Pre-Training report by Trainee, 6.Orientation/Interview for Trainees, 7.Conducting training, 8.Monitoring during training, 9.Submission of Post-Training Report by Trainee (Short term evaluation), 10.Evaluation Report by Trainer(Short term evaluation), 11.Closing Ceremony and issuance of certification, 12.Sharing Meeting at District Hospital to transfer acquired knowledge, 13.Long-term Evaluation to check continuous effectiveness of the training in 6-12 months after the training, 14. Making Annual Report by DOHA. In the evaluation of project, Mr. Nguyen Xuan Hung, staff of DOHA department mentioned *“Trainers and trainees’ attitude toward*



*training has greatly changed. In the past, few curriculum and materials available made training effectiveness totally depend on the trainees. After adoption of needs assessment and needs matching survey, trainers prepare the training curriculum corresponding to trainees’ needs”.*

In addition to the improvement of training management cycle, staffs of the clinical departments in charge of training were provided necessary training courses on specific skills as well as teaching methods by TOT training. Such training courses have made trainers (lectures) much more confident in knowledge and flexible in combining teaching methods when conducting training for staff of district hospitals. Dr. Dinh Van Thuan shared

usefulness of TOT training called “Teaching skills”, and he recalled his previous training style as *“I taught what I thought they needed.”* But now he has the teaching strategy *“putting the trainees centered, changing teaching methods depending on the experience and understanding of the trainees.”*

*“Participation is the word we felt in the training,”* recall Dr. Trieu Van Hung and Mr. Nguyen Cong Tien of Da Bac District Hospital who attended Essential Trauma Care training course in the HGH. They mean participation by not only OJT or group discussion, but trainers’ approach to the training. *“I really appreciate the trainers because they chose cases almost the same I face very often in the district hospital”.* Dr. Bui Van Than of the Kim Boi District Hospital also mentioned recalling his past training courses that *“Lack of mutual understanding leads to vague, unfocused contents making training ineffective”* and such *“Misunderstanding easily happens if there is no needs matching survey.”* Before training course DOHA department went to his hospital with a lecturer to check his knowledge and equipment. Dr. Bui Van Than said *“Because of it, I learned exactly what I wanted to learn and started using the skills learned soon after I came back to my hospital.”*

These enhanced capacity of training management both in individual and organization also have affected positively for management and communication in daily clinical activities.



### Collaboration with other donors and existing JICA projects

In order to achieve broader targets of the health sector, the Project has collaborated with other donors operating in the province. They include the projects, which focus on health promotion and health prevention of community people, such as “The project for Key improvement of the Community Health funded by Belgium Technical Cooperation”, “The Project for Rural Health Improvement by ADB” and “VNM7PG0003 Reproductive Health Project in cooperation with UNFPA”. Not only the clear demarcation of target which has worked effectively in the whole province, but also collaboration in training which was compensable for weak points of each project has contributed a lot. For instance UNFPA implemented training of reproductive health in HGH and district hospitals. On the other hand, JICA supports the training for anesthesia for obstetric emergency and other essential fields, such as Nosocomial infection control, nursing management and so on.

This project is also positioned to make maximum use of JICA program for health. Based on the past and current experience in training activities especially in the national hospitals, Bach Mai Hospital, Cho Ray Hospital and Hue Central Hospital where trainers for lower level hospitals have been trained to improve their capacity since 1995. Japan's grant aid for providing facilities and equipment for the HGH and involvement of Japan Overseas Cooperation Volunteers (JOCV) in supporting clinical activities have also greatly contributed to improve service quality in hospitals.

#### Major outcomes and outputs of the project and future prospect

Following are major outputs and outcomes during project period;

- The numbers of trainees supported by JICA overreached to 1,446 peoples during 5years of project. In fiscal year 2008, 21 training courses were organized.
- Although the total number of referral patients from HGH to central hospitals has increased, the total number of referral patients from HGH to central hospitals in the three priority areas (Emergency, Obstetrics and Pediatrics) has been slightly decreased. This indicates improved capacity in HGH.
- In 2008, "8 out of 12 hospitals" in Hoa Binh Province were rated as "excellent or totally excellent" in national evaluation of hospital. Its number was further increased to "10" in 2009. Criteria of evaluation includes the fields which was strengthened by the project such as "Examination and treatment", "Training", "Patient referral", "Nursing and total care", "Medical ethics and professional culture", "Emergency care", "Medical equipment management", "Nosocomial infection control", "Hospital management" and so on.

These achievements are going to be applied, as "Hoa Binh Model", to other provinces in northern regions in the planned JICA project. Vietnamese continuous medical education system is now on the process to be consolidated and strengthened further under the strong initiative of Ministry of Health. In the newly started "JICA Project for Improvement of the Quality of Human Resources in the Medical Service System, in Vietnam" since 2010, holistic approach for continuous medical education, from policy development at MOH to implementation of training at training centers in national hospitals, is going to be much encouraged.

## 6. El Salvador

Ya no está olvidada la enfermedad de Chagas en El Salvador - Espanol -

<b>Project Title</b>	Control de la enfermedad de Chagas fase 2		
<b>Project Duration</b>	De marzo 2008- De febrero 2011	<b>Project Location</b>	El Salvador
<b>Overall Objective of Project</b>	Se reduce significativamente la transmisión de la enfermedad de Chagas por <i>T. dimidiata</i> en El Salvador.		
<b>Applied KD/AGA</b>	AGA3: Scaling up health worker education and training		

La enfermedad de Chagas, es una enfermedad causada por el parásito *Trypanosoma cruzi* (*T. cruzi*), y más de 80% de la transmisión es vía vectorial. El *T. cruzi* existe en las heces del insecto (chinche). Las chinches por lo general habitan dentro de las grietas de las paredes de adobe y bahareque, o techo de paja, y se encuentra frecuentemente en las zonas rurales. Por esta razón, la enfermedad de Chagas se le llama “enfermedad desatendida y silenciosa”, y “enfermedad de los pobres”. La mayoría de las personas infectadas por *T. cruzi* llegan a la fase crónica con daño en el corazón, después de un período silencioso que puede durar 10 a 20 años. En 2006, la Organización Mundial de la Salud (OMS) estimó que 7.5 millones de personas estaban infectadas por la enfermedad de Chagas en Latinoamérica.



El Salvador es un país localizado en América Central, que está constituido por 14 departamentos con una extensión territorial de 20.742 km<sup>2</sup>. La enfermedad de Chagas en este país, ha infectado a 232 mil personas, casi 4.3% de la población salvadoreña. El conocimiento de la población sobre esta enfermedad es bajo, por lo que se hace difícil la prevención, detección temprana y el tratamiento temprano. Sin embargo, la enfermedad de Chagas es eliminable a través del control del vector (chinche), el control de la transmisión transfusional del *T.cruzi.*, y el mejoramiento de las viviendas.

En El Salvador, la Agencia de Cooperación Internacional de Japón (JICA) inició el Proyecto del Control de la Enfermedad de Chagas en el año 2003, junto con el Programa Nacional de Control de la Enfermedad de Chagas del Ministerio de Salud y la Organización Panamericana de la Salud (OPS). En la primera fase del proyecto, se implementó en tres departamentos occidentales (Ahuachapán, Santa Ana y Sonsonate) entre 2003 y 2007, y se realizó el rociamiento para el control del vector. Con estas actividades el índice de infestación de *Triatoma dimidiata*, uno de los dos vectores principales que transmiten la enfermedad de Chagas en El Salvador, bajó en esta zona. Desde el 2008, en la segunda fase del Proyecto, amplió a siete departamentos objeto. El proyecto tiene el objetivo de establecer el sistema de vigilancia de la enfermedad con participación comunitaria, para mantener el nivel de infestación vectorial bajo.

A propósito, ¿ha escuchado la palabra “Chagólogo”? Como “Epidemiólogo” o “Cardiólogo”, esta palabra implica la gente que trabaja en el control de la Enfermedad de Chagas. No sé si ésta es una palabra inventada o no. Pero, a veces llamamos “Chagaloco” (loco por Chagas) con mucho cariño a la persona que se dedica a la Enfermedad de Chagas con entusiasmo. Sin duda, los logros y avances del control de la enfermedad de Chagas en Latinoamérica es la historia de lucha de los chagalocos. En caso de El Salvador, no debemos de olvidarnos de tres grandes Chagólogos.

El primero Chagólogo es el Dr. Juan C. Segovia, el descubridor del parásito *T.cruzi* en El Salvador en el año 1913, 4 años después del descubrimiento del Dr. Carlos Chagas en Brasil. El Dr. Segovia identificó formas evolutivas del parásito en el intestino de la chinche, y describió los casos clínicos agudos. También investigó el método de diagnóstico y tratamiento. Sus hallazgos contribuyeron al desarrollo de la dilucidación de la enfermedad. Desde esa época el Dr. Segovia había manifestado las características de la enfermedad como “La enfermedad es un problema de salud de los campesinos y del proletariado salvadoreño” (1916)”, y todavía sigue siendo el problema de los pobres.



La segunda Chagóloga es la Dra. María Isabel Rodríguez, la Sra. Ministra de Salud de El Salvador en la actualidad. Ella fue alumna del Dr. Segovia. Ya que ella misma fue la investigadora de Chagas como cardióloga, la Dra. Rodríguez ha caminado junto con la



historia de Chagas en El Salvador. Por ejemplo, ella nos contó sobre el primer caso de Chagas en El Salvador durante la primera reunión del programa, y además, empezó a explicar el detalle del segundo caso de Chagas del país cuando nos reunimos por segunda vez. El alto nivel de interés de la Dra. Rodríguez ha fomentado la promoción del proyecto.

El tercer Chagólogo es el Dr. Rafael A. Cedillos, enciclopedia viviente de la enfermedad de Chagas, quien cumple 84 años, y sorprendentemente, fue alumno de la Sra. Ministra de Salud. Él fue profesor de la Universidad de El Salvador y director por muchos años del Centro de Investigación y Desarrollo en Salud (CENSALUD), desde donde brindó un importante apoyo a las actividades del Proyecto de Control de Chagas. También ha trabajado como investigador de las enfermedades transmitidas vectorizadas en OPS. El Dr. Cedillos siempre acompaña las jornadas de capacitación y da charlas sobre Chagas dirigida al personal de salud.

Aunque por ahora las áreas del proyecto son siete departamentos, sabemos que existe alto riesgo por la enfermedad de Chagas a nivel nacional. Por esta razón, a partir del 2009, JICA empezó a dar apoyo técnico en los 14 departamentos. Especialmente, el curso del diplomado de Entomología Médica en CENSALUD de la Universidad de El Salvador, que se realizó de febrero a diciembre de 2009, fue un elemento fundamental del trabajo de nivel nacional. Se tuvo la participación de los entomólogos de las respectivas Unidades de Vectores de los 14 departamentos en dicho diplomado. Los cursos se realizaron los días sábados con un total de 100 horas didácticas para obtener el diploma. Durante el curso, 44 participantes aprendieron sobre epidemiología, diagnóstico, tratamiento, protección, sistema de control y vigilancia de las enfermedades transmitible por vectores, como Chagas, Malaria, Dengue y Leishmaniasis. El jefe nacional de vectores, el Ing. Eduardo Romero y el Dr. Cedillos como organizadores y docentes dieron instrucciones a los participantes en todo el proceso. Durante el curso, como parte de la práctica y elaboración de la tesis, los entomólogos implementaron el estudio de la encuesta entomológica en 157 municipios (60.0% de cobertura de los municipios del país), enfocándose en las localidades donde había *Rhodnius prolixus* (*R.p.*) durante 1950' – 70', uno de los dos vectores principales que transmitieron la enfermedad de Chagas en El Salvador. Esta investigación mostró la ausencia del *R.p.* en este país, y el resultado pudo ser una evidencia para la certificación de la eliminación de *R.p.* que asignó OPS en junio del 2010, en la XII reunión de IPCA (Iniciativa de los Países de Centroamérica para el Control de la Enfermedad de Chagas). Además, en este año, se replicó el curso diplomado a cuatro departamentos de la Región Oriental (Usulután, San Miguel, Morazán y La Unión). Los

participantes que ya habían recibido su diploma el año pasado, tomarán un rol muy importante para duplicar el curso. Esta vez, un total de 150 participantes del personal de salud, entre ellos Personal de Vectores y Supervisor de Salud asistieron al curso que duró 100 horas.

En un principio se asignó como contraparte directa a las Unidades de Control Vectorial y epidemiología, pero cabe destacar que poco a poco se han ido incorporando las demás unidades como: Salud Comunitaria, Saneamiento Ambiental, Educadores y Promoción de la Salud, hasta llegar a formar equipos multidisciplinarios a nivel regional y local, que trabaja cada uno en su área, pero enfocado al mismo objetivo.

Para establecer el sistema de vigilancia con participación comunitaria, es indispensable el fortalecimiento de las actividades de educación y promoción de la salud. Por lo tanto, se realizaron capacitaciones dirigidas a Médico Epidemiólogo, Supervisores de Vectores, Salud Comunitaria, Saneamiento Ambiental y Educador, haciendo un total de 4,000 personas de salud a nivel nacional que recibieron materiales promocionales y educativos en el 2009 y 2010. Durante la capacitación, surgieron varios comentarios y preguntas, por ejemplo “Cuando era niña, habían chinches en mi casa”, “Mi mamá murió por la enfermedad cardiopatía. Podría ser de Chagas?”, etc. Los participantes pudieron sentir la enfermedad de Chagas como el problema que toca de cerca.



El medio decisivo para extender las actividades del Control de la enfermedad de Chagas a escala nacional fue la colaboración del Ministerio de Educación. La emisión del nuevo libro texto de sexto grado en la asignatura de “Ciencia, Salud y Medioambiente” en el cual ha sido incluido el tema de la enfermedad de Chagas, y fue distribuido aproximadamente a 5,000 Centros Educativos, con esto se aceleró las actividades escolares a nivel nacional (enero 2008). En consecuencia, JICA financió la reproducción y distribución de 6,000 materiales educativos como rotafolios y afiches, elaborado por el Proyecto. Para asegurar el método de enseñanza de los maestros de los Centros Educativos, JICA organizó con la colaboración del Ministerio de Educación y el Ministerio de Salud, una serie de jornadas de capacitación para 350 Supervisores Pedagógicos del Ministerio de Salud del nivel nacional en el 2010.

Además la oficialización del “**Día Nacional de Chagas**”, el **9 de julio**, en honor al natalicio del Dr. Carlos Chagas, descubridor de la enfermedad con la conmemoración del Centenario de su importante hallazgo (a partir de julio de 2009). De ésta manera El Salvador se convierte en el primer país del mundo en realizar dicha celebración. La instauración del “Día Nacional de Chagas”, pretende que a partir de éste año cada día 9 de julio se realicen diferentes actividades educativas y promocionales sobre Chagas, en las comunidades, centros de salud y centros educativos, entre otros, con el objetivo de concientizar a la población sobre la prevención y riesgos de la enfermedades y fortalecer el sistema de vigilancia entomológica y epidemiológica en las comunidades. En 2009, un tercio de los Centros Educativos participaron en las campañas de la celebración del Día de Chagas.

La firma de convenio entre el Ministerio de Salud y el Ministerio de Educación al nivel nacional (marzo 2010) fomentó la colaboración muy firme entre ambos Ministerios. Ahora se lleva a cabo las educaciones preventivas con la participación de los padres de familia de los alumnos. El Día Nacional de Chagas en 2010, se logró implementar a nivel nacional una campaña, a través de una Circular que el Sr. Ministro de Educación giró para que el 100% de Centros Educativos Públicos tuvieran actividades ese día alusivos a la enfermedad. Por otro lado también, la Sra. Ministra de Salud emitió una carta para que 100% de establecimientos de salud participaran en la campaña realizando actividades educativas. Por el compromiso establecido, parece que ya la enfermedad de Chagas no está olvidada ni silenciosa en El Salvador.

Cabe mencionar el agradecimiento que le tenemos al Dr. Rafael Cedillos, por acompañarnos en todas las jornadas como docente de las capacitaciones realizadas. Estamos un poco apenados por el abuso que hemos tenido con el Dr. Cedillos, ya que él nos acompaña enteramente y voluntariamente. Siempre que le solicitamos su apoyo, nos dice, “No se preocupe, soy jubilado, tengo tiempo.” con gran sonrisa y júbilo. Durante las jornadas no existe ninguna nueva técnica de enseñanza, pero sin embargo, se percibe que la llegada del Dr. Cedillos de 84 años de edad, experto y sabedor de la enfermedad, y con grandes deseos de transmitir sus experiencias y conocimientos a la próxima generación, ilumina a los participantes y estimula la motivación para realizar el control de la enfermedad de Chagas. La mayoría de los Directores de los establecimientos de Salud han sido en algún momento de sus estudios alumnos del Dr. Cedillos, por lo que lo ven con mucho respeto y muestran un alto interés sobre Chagas. Como resultado de las capacitaciones al personal de salud, los promotores de salud que pertenecen a cada

localidad, con los conocimientos básicos de la enfermedad, empiezan a detectar los casos de Chagas en la población y a referirlos a la Unidad de Salud correspondiente, para su diagnóstico temprano. No sabemos cuántas personas exactamente han sido beneficiadas en El Salvador, pero el personal de Salud ya cuenta con el conocimiento y práctica sobre el control de la enfermedad de Chagas, también, posee el esquema para la sistematización de la vigilancia con participación comunitaria. Ahora, esperamos que surjan chagólogos de nueva generación, sucesores del Dr. Cedillos, para este país.

## Chagas Disease Control Project Phase 2 - English -

<b>Project Title</b>	Chagas Disease Control Project Phase 2		
<b>Project Duration</b>	March 2008- February 2011	<b>Project Location</b>	El Salvador
<b>Overall Objective of Project</b>	The transmission of the Chagas disease through <i>T. dimidiata</i> significantly reduces in El Salvador.		
<b>Applied KD/AGA</b>	AGA3: Scaling up health worker education and training		

The Chagas disease is a parasitic infection caused by the protozoan *Trypanosoma cruzi* (*T. cruzi*), which is mainly transmitted to humans by blood-sucking triatomine bugs as they feed on blood and deposit their feces on the skin. *T. cruzi* is present in the feces of the triatomine vector. These triatomine bugs are commonly named kissing bugs. Generally, the kissing bugs live in



the cracks of adobe houses, in mud-walls, and in thatched or straw roof dwellings frequently found in rural areas. For such reason, Chagas disease is called “the forgotten and neglected disease”, and “disease of the poor”. The majority of the infected persons by the *T. cruzi* reach its chronic phase with heart failure, after a silent period that can last from 10 to 20 years. In 2006, the World Health Organization (WHO) estimated that 7.5 million persons were infected by the Chagas disease in Latin America.

El Salvador is a country located in Central America, which consists of 14 prefectures with a land area of about 20.742 km<sup>2</sup>. PAHO estimated that about 232,000 persons are infected with Chagas disease, almost 4.3% of the Salvadorian population. Low awareness of people regarding this disease makes its prevention, early detection and treatment difficult. However, the Chagas disease is eliminable through vector control activities, control of transfusional transmission of *T.cruzi*, and the improvement of housing conditions.

In El Salvador, the Japan International Cooperation Agency (JICA) launched the Project for

Control of the Chagas Disease in 2003, along with the National Chagas Disease Control Program of the Ministry of Health and the Pan American Health Organization (PAHO). The first phase of the JICA project targeted three western prefectures (Ahuachapán, Santa Ana, and Sonsonate), and implemented a baseline survey and vector control activities between 2003 and 2007. As a result, the *T. dimidiata* infestation rate, one of the two main vectors which transmit the Chagas disease in El Salvador, was decreased in this area. The second phase, which was launched in March, 2008, targets seven prefectures. It aims at maintaining a low level of infestation in the western prefectures, via establishing an effective surveillance and control system, and to expand Chagas disease vector control activities in the Central and Eastern regions.

By the way, have you heard the word “Chagalogist?” It does have a similar connotation to “Epidemiologist” or “Cardiologist”. That word implies people who work for the control of Chagas disease. I don’t know if this word is a coined term or not. Nonetheless, we kindly use the name of “Chagaloco” (Spanish: crazy for Chagas) for people who are enthusiastically dedicated to the Chagas disease. Without a doubt, the achievements and progress made for the Chagas disease control in Latin America is the history of struggles of the Chagalocos. In El Salvador’s case, we must not forget three great Chagalogists.

The first Chagalogist is Dr. Juan C. Segovia, the founder of the *T. cruzi* parasite in El Salvador in 1913, 4 years after the discovery by Dr. Carlos Chagas in Brazil. Dr. Segovia identified evolved forms of the parasite in the kissing bug’s intestine, and described acute clinic cases. He also investigated the diagnosis and treatment method. His finding contributed to the development of the elucidation of the disease. From that time, Dr. Segovia had manifested the characteristics of the disease as “The disease is a health problem for peasants and Salvadorian proletariats (1916)”, and it is still a problem for poor people.

The second Chagalogist is Dr. María Isabel Rodríguez, the current Minister of Health of El Salvador. She was one of Dr. Segovia’s students. Moreover, she was the Chagas investigator and a cardiologist, therefore, Dr. Rodríguez has been part of the Chagas history in El Salvador. For example, she told us about the first case of Chagas in El Salvador during the first meeting of the program; in addition, the second time we met, she explained in detail the second



Chagas case in the country. The high degree of interest of Dr. Rodríguez towards this topic has encouraged the promotion of the project.

The third Chagalogist is Dr. Rafael A. Cedillos, a walking dictionary of the Chagas disease, who is 84 years old and surprisingly enough, was a student of the Minister of Health. He was a professor at the University of El Salvador and director of the Center for Health Research and Development (CENSALUD) for many years. He has also worked as an investigator of the vector transmitted diseases in PAHO. Dr. Cedillos always accompanies the Chagas trainings and lectures imparted for the health personnel. We really appreciate the significant support he has provided to the activities of the Project.

Even though the project targets now seven prefectures, we recognize the presence of high risk of the Chagas disease at national level. Therefore, from 2009, JICA expanded its technical support to the whole country, covering the 14 prefectures. Especially, the course for obtaining a diploma in Medical Entomology from CENSALUD at the University of El Salvador, which took place from February to December 2009, was a fundamental element of the nationwide activities. The entomologists of the Vector Control Units from the 14 prefectures participated in the course. Lectures were held on Saturdays with a total of 100 teaching hours to obtain the diploma. During the course, 44 participants learned about epidemiology, diagnosis, treatment, prevention and control and surveillance system of transmissible diseases by vectors, such as Chagas, Malaria, Dengue and Leishmaniasis. The national coordinator of program, Mr. Eduardo Romero and Dr. Cedillos gave instructions to the participants during the whole process, as organizers and teachers. As part of the practice and thesis elaboration, the students implemented the entomologic survey in 157 municipalities (60.0% of coverage of all municipalities in the country), focusing in the localities where there was *Rhodnius prolixus* (*R.prolixus*) during 1950' – 70', one of the two main vectors which transmitted the Chagas disease in El Salvador. This investigation demonstrated the absence of *R.prolixus* in this country, and the result could be an evidence for the certified elimination of *R.prolixus* by PAHO in June 2010, in the XII annual meeting of IPCA (Initiative of the Central American Countries for the Control of the Chagas Disease). Moreover, the course was replicated in four prefectures of the Eastern Region (Usulután, San Miguel, Morazán and La Unión) in 2010. The participants who had already received a diploma in 2009, played a very important role in duplicating the course. This time, a total of 150 participants of the health staff, among them Vectors Staff and Health Supervisor attended the course, which lasted 100 hours.

At the beginning, only the Vector Control Unit and Epidemiology Unit were assigned as direct counterparts, but it is worth mentioning that little by little the other units have been incorporated, such as: Community Health Unit, Environmental Health Unit, and Health Promotion Unit, up to forming multidisciplinary teams at regional and local level, working in their respective area but focused on the same objective. To establish the surveillance system with community participation, it is indispensable to strengthen health education and promotion activities. Therefore, various trainings were held for Epidemiologist, Supervisor of Vector Controls, Community Health, Environmental Health and Health Promotion, and a total of 4,000 health workers at national level received promotion and educational material in 2009 and 2010. During the training, several comments and questions were arised, for example “When I was a little girl there were kissing bugs at home”, “My mom died of heart disease, could it be caused by chagas?”, etc. The participants could feel the Chagas disease as an immediate problem.



The decisive factor in scaling up the Chagas disease control activities at national level was the collaboration of the Ministry of Education. The emission of the new text book “Science, Health and Environment” for sixth grade elementary school, which includes the topic of Chagas disease, and its distribution among approximately 5,000 schools, accelerated nationwide educational activities (January 2008). Consequently, JICA financed the reproduction and distribution of 6,000 educational materials about Chagas disease, such as flip charts and posters elaborated by the project. To ensure adequate teaching methods in the schools, JICA, with the collaboration of the Ministry of Education and Ministry of Health, organized a series of trainings for 350 pedagogical supervisors from the Ministry of Health at national level in 2010.

Additionally, the “**National Chagas Day**”, **July 9**, was made official in honor of Dr. Carlos Chagas’ nativity, discoverer of the disease, in commemoration of the centenary of his important finding (from July 2009). This is how El Salvador becomes the first country in the world to carry out such celebration. The establishment of the “National Chagas Day” aims that every 9th of July various educational and promotional activities are carried out, at communities, health centers and schools, among others, in order to raise public awareness on prevention and risks of the diseases, as well as strengthen the entomological and



epidemiological surveillance system in the communities. In 2009, a third of the schools participated in the campaigns on Chagas Day.

The signing of the Chagas disease prevention and control agreement between the Ministry of Health and the Ministry of Education at national level (March 2010) encouraged the firm collaboration between both ministries. Now, preventive education is carried out with the participation of the students' parents. The National Chagas Day in 2010 was implemented at national level with a campaign that encouraged through a notice letter made by the Minister of Education, for 100% of the public schools to carry out activities that related to the disease for that day. Also, the Minister of Health emitted a letter to 100% of the health establishments to participate in the campaign, carrying out educational activities. Due to the established commitment, it seems that the Chagas disease is no longer a forgotten or neglected disease in El Salvador.

We give special thanks to Dr. Rafael Cedillos, for joining us as a lecturer on all seminars and trainings that were carried out. We're a little ashamed for taking advantage of Dr. Cedillos, since he fully accompanies the process voluntarily. When we ask for his support, he always says "Don't worry, I'm retired. I have time" with a great smile and joy. Dr. Cedillos does not utilize new teaching methods in his lecture. However, the presence of Dr. Cedillos of 84 years of age, expert on the disease, with great will of transmitting his experience and knowledge to the next generation, enlightens the participants and stimulates in them the motivation to carry out the control of the Chagas disease. The majority of the directors of the Health Center have been at some point in their studies, students of Dr. Cedillos, reason for which they regard him with great respect and show high interest in Chagas. As a result of the trainings to the health staff, the health promoters of each Health Center, with basic knowledge of the disease, start to detect the cases of Chagas in the community, and refer them to the corresponding Health Center for its early diagnosis. We don't know exactly how many people have been benefitted from the Chagas disease control project in El Salvador, but we realize that the health workers already have the necessary knowledge and practice on the control of the Chagas disease. At the same time, the scheme of the surveillance system with community participation has been introduced. Now, we expect new generations Chagalogists, successors of Dr. Cedillos in this country.

## Annex

### The Kampala Declaration

<http://www.who.int/workforcealliance/Kampala%20Declaration%20and%20Agenda%20web%20file.%20FINAL.pdf>

We, the participants at the First Global Forum on Human Resources for Health in Kampala, 2-7 March 2008, and representing a diverse group of governments, multilateral, bilateral and academic institutions, civil society, the private sector, and health workers' professional associations and unions;

Acknowledging that the enjoyment of the highest attainable standard of health is one of the fundamental human rights;

Recognizing the need for immediate action to resolve the accelerating crisis in the global health workforce, including the global shortage of over 4 million health workers needed to deliver essential health care;

Recognizing the devastating impact that HIV/AIDS has on health systems and the health workforce, which has compounded the effects of the already heavy global burden of communicable and non-communicable diseases, accidents and injuries and other health problems, and delayed progress in achieving the health-related Millennium Development Goals;

Recognizing that in addition to the effective health system, there are other determinants to health;

Aware that we are building on existing commitments made by global and national leaders to address this crisis, and desirous and committed to see immediate and urgent actions taken;

Now call upon:

1. Government leaders to provide the stewardship to resolve the health worker crisis, involving all relevant stakeholders and providing political momentum to the process.
2. Leaders of bilateral and multilateral development partners to provide coordinated and coherent support to formulate and implement comprehensive country health workforce strategies and plans.
3. Governments to determine the appropriate health workforce skill mix and to institute coordinated policies, including through public private partnerships, for an immediate, massive scale-up of community and mid-level health workers, while also addressing the need for more highly trained and specialized staff.
4. Governments to devise rigorous accreditation systems for health worker education and

training, complemented by stringent regulatory frameworks developed in close cooperation with health workers and their professional organizations.

5. Governments, civil society, private sector, and professional organizations to strengthen leadership and management capacity at all levels.
6. Governments to assure adequate incentives and an enabling and safe working environment for effective retention and equitable distribution of the health workforce.
7. While acknowledging that migration of health workers is a reality and has both positive and negative impact, countries to put appropriate mechanisms in place to shape the health workforce market in favour of retention. The World Health Organization will accelerate negotiations for a code of practice on the international recruitment of health personnel.
8. All countries will work collectively to address current and anticipated global health workforce shortages. Richer countries will give high priority and adequate funding to train and recruit sufficient health personnel from within their own country.
9. Governments to increase their own financing of the health workforce, with international institutions relaxing the macro-economic constraints on their doing so.
10. Multilateral and bilateral development partners to provide dependable, sustained and adequate financial support and immediately to fulfill existing pledges concerning health and development.
11. Countries to create health workforce information systems, to improve research and to develop capacity for data management in order to institutionalize evidence-based decision making and enhance shared learning.
12. The Global Health Workforce Alliance to monitor the implementation of this Kampala Declaration and Agenda for Global Action and to re-convene this Forum in two years' time to report and evaluate progress.

## An Agenda for Global Action

<http://www.who.int/workforcealliance/Kampala%20Declaration%20and%20Agenda%20web%20file.%20FINAL.pdf>

This Agenda for Global Action will guide the initial steps in a coordinated global, regional and national response to the worldwide shortage and mal-distribution of health workers, moving towards universal access to quality health care and improved health outcomes. It is meant to unite and intensify the political will and commitments necessary for significant and effective actions to resolve this crisis, and to align efforts of all stakeholders at all levels around solutions.

It builds on commitments already made by high-level policy makers in efforts designed to marshal the world's collective knowledge and resources to reverse this crisis<sup>1</sup>.

*Everyone committed to this agenda shares the vision that **'all people, everywhere, shall have access to a skilled, motivated and facilitated health worker within a robust health system'**.*

Acute shortages of health workers in most countries, rich and poor, are undermining advances already made in improving health and threaten further progress.

The health workforce challenges we face cannot be left to individual countries, nor delegated to international agencies. Along with the need to significantly scale up investments in the health workforce as part of any effort and initiative to build health systems, the global and national policy environment must create the necessary space for effective action, where multiple stakeholders pull together, guided by evidence, innovation, solidarity and mutual accountability.

The Agenda for Global Action is built around six fundamental and interconnected strategies, based on previous actions and commitments. It is a synthesis that specifically highlights challenges and the need for change which reflects the essential continuum of planning, training, deployment and retention. Its purpose is to translate political will, commitments, leadership and partnership into effective actions.

The six interconnected strategies are:

1. Building coherent national and global leadership for health workforce solutions
2. Ensuring capacity for an informed response based on evidence and joint learning
3. Scaling up health worker education and training
4. Retaining an effective, responsive and equitably distributed health workforce
5. Managing the pressures of the international health workforce market and its impact on migration
6. Securing additional and more productive investment in the health workforce

## II Review of JICA’s cooperation on human resources in health sector

### 1. Methodology of review

A total of 343 cases were selected for review by this study from JICA’s database on projects in health sector. All JICA projects/operations started before the end of December 2010 that are deemed to support “human resource development” and “capacity strengthening or capacity development” based on the project summary sheet descriptions were chosen for review. These cases cover a wide range of JICA’s cooperation schemes including Technical Cooperation Projects, Technical Cooperation Projects- Science and Technology, Development Study projects, Grant Aid Projects, Individual Projects (dispatch of experts), Individual Projects (dispatch of experts)-science and technology, Individual Projects (country focused training), Third-country Training, and JICA Partnership Programs (JPP).

Following table summarizes the scope of data reviewed by this study according to schemes of JICA operations:

Table 1 Scope of data covered by JICA projects review

JICA cooperation scheme	Scope of Data
Technical Cooperation Projects	Projects that are carried out as Project-type Technical Cooperation, dispatch of team of experts, research cooperation, as of 1 April 2002, as well as those started after FY 2002 until December 2010.
Technical Cooperation Projects- Science and Technology	Projects that started from 2009 until end of December 2010.
Development Study projects	Projects that ended after 1 April 1997 for those undertaken by former Social Development Study Department. In addition, other projects that started after FY 2002 until end of December 2010 are covered.
Grant Aid Projects	Projects that ended after 1 April 1997 as well as those that are currently ongoing.
Individual Projects (dispatch of experts)	Projects that started between June 2008 and December 2010.
Individual Projects (dispatch of experts)- science and technology	Projects that started between June 2008 and December 2010.
Individual projects (country focused training)	Courses that started between June 2008 and December 2010.
JICA Partnership Programs (JPP)	Projects that started after FY 2002 until end of December 2010.
Third-country Training	Courses that started after FY 2002 until end of December 2010.

All 343 projects/cases were classified and analyzed according to the following entries.

- Regions of JICA operations
- Schemes of cooperation

- Focus on training of human resources for health (HRH) as a main component of the project
- Administrative level of cooperation (country level, state level, provincial/capital level, etc.)
- Approach levels of intervention (policy level, clinical level, management level)
- Types of education supported by JICA (pre-service education, internship, in-service training, education for advanced degrees/licenses)
- Professions targeted for training and education
- Contents of support for training and education
- Support for mitigation of HRH shortages

## 2. Summary

Based on the outcome of mentioned review of JICA operations, following points can be said about the overall characteristics of JICA operations concerning HRH.

### Overall trend

- Basic approach of JICA cooperation is for all activities to be implemented within the existing policy and public administration frameworks of the recipient country.
- JICA places emphasis on both increasing the number of HRH and upgrading their quality in order to improve access to necessary health services, which is essential in achieving health-related Millennium Development Goals.

### Regional distribution and cooperation schemes

- In terms of regional distribution of 343 JICA projects/operations, projects implemented in Asia have the highest percentage (42% of the total caseload<sup>3</sup>), followed by Africa (27%), Middle East (13%), Central and South America (13%) . The number of projects in Africa and Middle East regions is on the rise in the past 2-3 years, and the number of countries assisted in these regions is also increasing.
- Breakdown of projects according to schemes of JICA cooperation, Technical Cooperation Projects make up most with 53% of the total caseload reviewed. In addition, multiple types of cooperation activities are carried out by JICA, including support and cooperation through JPPs, country focused training and dispatch of experts under Individual Projects, improvement of work environment, facilities and equipment through Grant Aid Projects.<sup>4</sup>
- With respect to Individual Projects (dispatch of experts), 19 out of 27 persons were deployed in Africa, followed by Middle East regions. There are examples of support in capacity development at policy level, including support for HRH strategic plan formulation, and assistance to formulate and materialize technical cooperation under this category of cooperation scheme.

---

<sup>3</sup> The caseload includes JICA cooperation schemes excluding JOCV and Training Program in Japan, i.e., Technical Cooperation Projects, Technical Cooperation Projects- Science and Technology, Development Study, Grant Aid Projects, JPPs, Individual Projects (dispatch of experts, dispatch of experts- science and technology, country focused training), Third- country Training.

<sup>4</sup> In recent years, JICA is reviewing its operations to consolidate “projects” into “programs,” whereby several “projects” having common objectives are consolidated into one “program.” “Program” is defined as “a strategic framework to support the achievement of mid- or long-term development objectives of a particular sector of the developing countries.” JICA is promoting the implementation of more strategic programs and projects.

- As for Training Program in Japan, 47% of the courses were open to all regions, followed by courses for Africa (17%), Asia (8%), Central and South America (7%), and Middle East (5%).
- Dispatch of JOCVs in health sector began in 1966. As of December 2008, a total of 5,043 persons had been deployed in total of 93 countries under this program. Largest number of JOCVs, 1,519 persons or 30% had been dispatched to Asia, followed by 1,369 persons (27%) to Central and South America, 1,353 (27%) to Africa, 447 (9%) to Oceania, 301 (6%) to Middle East.

#### Training of HRH within the project activities

- Among the caseload as whole, high proportion of projects/cases (87%) included training activities.
- Individual Projects (country focused training) and Third-country Training are projects which are fully focused on training.
- Technical Cooperation Projects, in general, are aimed at supporting the capacity development of the counterpart agency of the recipient country, and therefore, they tend to include some forms of training activities.
- In carrying out training activities such as through Individual Projects, efforts are made to make use of human and other resources and apply lessons learned from good practices, regardless of the location of training (whether in recipient country, in Japan or in Third-country).

#### Administrative levels and approach levels of intervention

- Concerning administrative level of cooperation, 50% of total caseload was carried out at country level, followed by state level at 20%. It should also be noted that 52% of JPP projects were implemented at municipal or more grass-roots level.
- As for the approach levels of intervention of JICA projects, almost half or 45% of the caseload reviewed was carried out at multiple levels, for instance, with a combination of policy, clinical and management and operations levels, and a combination of clinical and management and operations levels.

#### Types of education supported by JICA

- Support for in-service training is provided in 65% of the total caseload reviewed, while support for pre-service education is provided in 10%.
- Most of the cases of Training Program in Japan are in-service training, however, “education for advanced degree/licenses” is also provided in cases of long-term



training.

#### Professions targeted for training and education

- The breakdown of professions targeted for training/education was nurses/midwives (20%), medical doctors (14%), laboratory technicians (7%) , other health professionals (15%), government officials (18%) , volunteers (9%) and others.
- Main professions targeted for Training Program in Japan are government officials (36%) and medical doctors (22%) .

#### Contents of support for training and education

- Regarding contents of support for training/education, many cases included support for "operations and management." Also, relatively large number of cases provided support for training/education on multiple topics, with a tendency to focus on "operations and management" and "training course development and training standards/curriculum/teaching material development," combined with "TOT" and/or "improvement of work environment, facilities and equipment."

#### Support for mitigation of HRH shortages

- As regards JICA's support to mitigate issues relating to HRH shortages, projects/cases are carried out in response to issues at Workforce Stage mainly by improving lifelong learning opportunities, management and supervision, and work environment. Relatively large number of cases addresses Entry Stage issues by supporting the improvement of pre-service education.
- In Technical Cooperation Projects, activities are carried out to understand local needs, institutionalize training, conduct monitoring and evaluation of training, and develop training database, etc. This is enabling the projects to conduct various training activities with improved efficiency/effectiveness, increased fairness in terms of training opportunities, and improved performance at workplace.
- Support for provision of incentives to deal with retention issues in HRH is mainly done through provision of continuing education, improvement of work environment and safety. Approaches that reinforce the sense of ownership and motivation of the recipient country counterparts, and introduction of systems to measure their performances also serve as incentives.

### 3. Review

#### 3-1 Regions and types of cooperation

The following table summarizes the caseload of 343 cases according to regions. Projects focused on Asia have the largest number of 144 cases (42% of total), followed by Africa (91 cases, 27%), Middle East (46 cases, 13%) and Central and South America (43 cases, 13%).

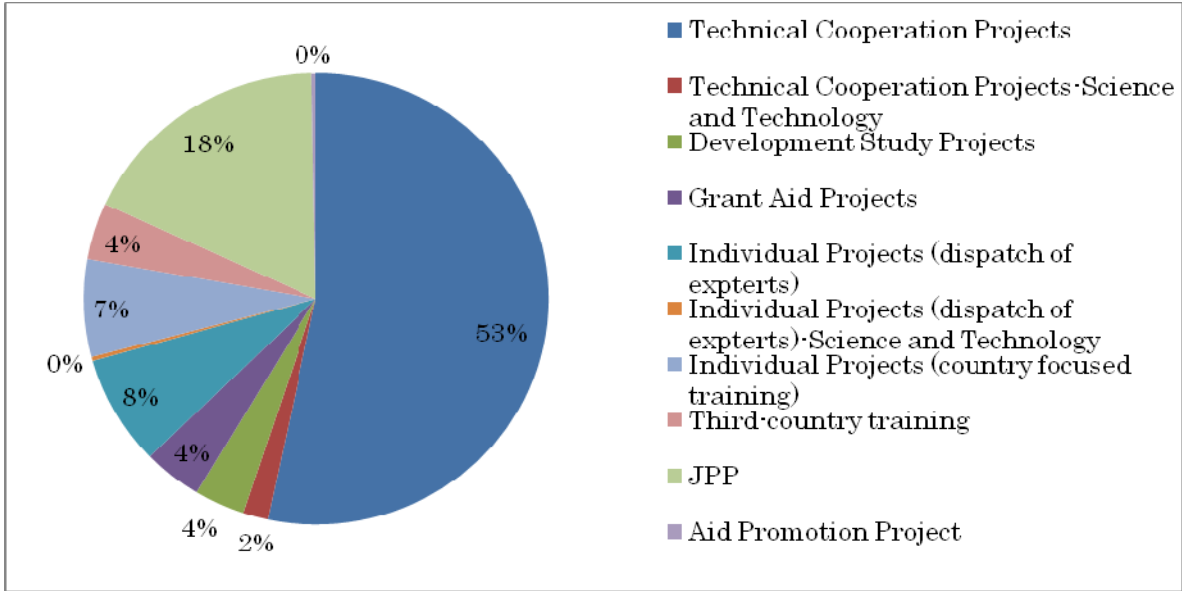
Table 2 Regional distribution of the caseload

Region	Asia	Oceania	Central & South America	Middle East	Africa	Europe	Total
Number of countries	19	6	13	12	24	3	77
Number of projects/cases	144	16	43	46	91	3	343
(%)	42	5	13	13	27	1	100
Technical Cooperation Projects	81	3	31	21	46	1	183
Technical Cooperation Project- Science and Technology	3	0	1	0	2	0	6
Development Study projects	7	0	1	0	4	0	12
Grant Aid Projects	6	2	1	0	4	1	14
Individual Projects (dispatch of experts)	3	0	0	5	19	0	27
Individual Projects (dispatch of experts)- science and technology	0	0	0	0	1	0	1
Individual Projects (country focused training)	4	1	0	11	7	1	24
Third-country Training	1	1	5	7	0	0	14
JPP	39	8	4	2	8	0	61
Aid Promotion projects	0	1	0	0	0	0	1

Note:.) Cases of dispatch of individual experts and short-term experts until the end of May 2008 are included in Technical Cooperation Projects according to the descriptions of JICA's project summary sheets.

Classification of the caseload according to schemes of cooperation is summarized in table 2 and Figure 1. Technical Cooperation Projects make up most in terms of the type of cooperation with 53% of the total caseload reviewed, followed by JPP (18%).

Figure 1 HRH related activities of JICA: Breakdown according to schemes



**3-2 Focus on training of HRH as a main component of the project**

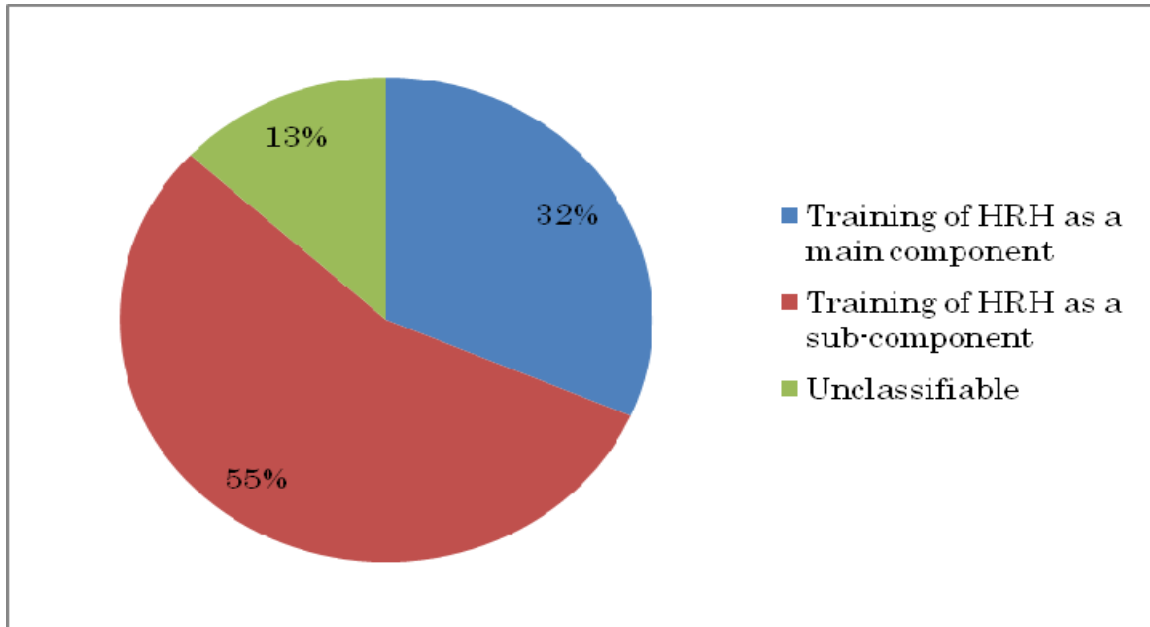
Based on review of all JICA’s project summary sheets, the caseload (343 cases) was classified according to the following 3 categories: case with a focus on training of HRH<sup>5</sup> as a main component; case which carries out such training as a sub-component (not main), and; case which cannot be classified from the project summary sheets.

Table 3 Focus on training of HRH

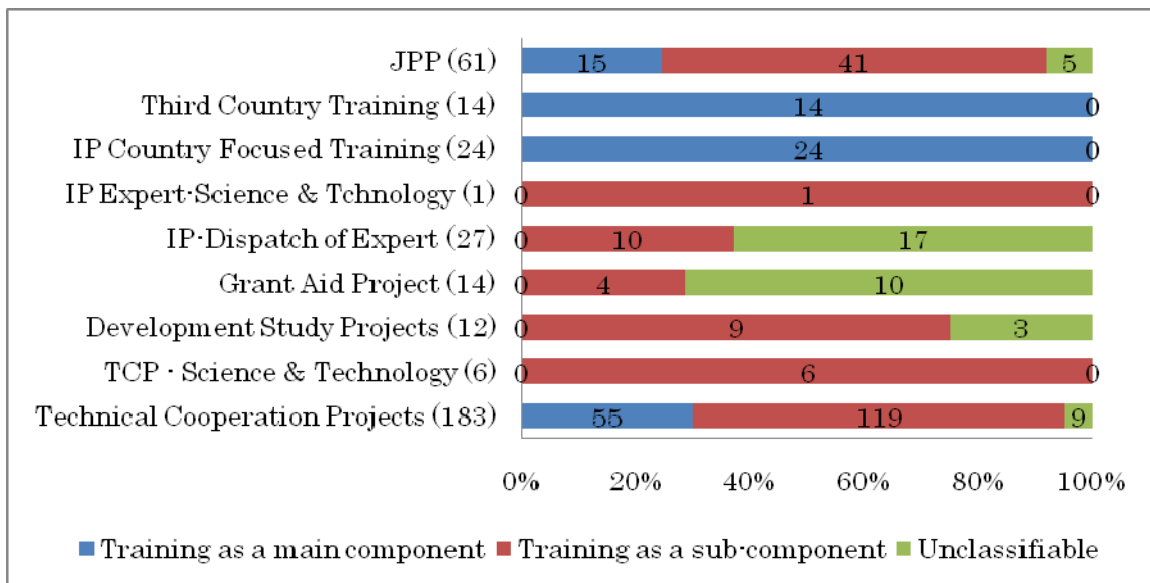
	No. of cases	%
Training of HRH as a main component	108	32
Training of HRH as a sub-component	190	55
Unclassifiable	45	13
Total	343	100

<sup>5</sup> Here, “HRH” refers not just the licensed “health service providers” such as medical doctors, nurses, midwives, laboratory technicians, etc. It also includes “those who support the health system” regardless of the license, such as administrators, operations and management service providers, and volunteers trained to carry out various health-related activities in the community.

Figure 2 Breakdown according 3 categories  
Total caseload



By types of cooperation/scheme



IP: Individual Project

< Technical Cooperation Project >

55 out of 183 cases (30%) of Technical Cooperation Projects (including former Project-type Technical Cooperation, and dispatch of experts up to May 2008) had training of HRH as their main component, while 119 cases (65 %) had such training as sub-component. Out of the 55 cases that conducted training as main component, 23 cases/projects were focused

on providing educational training and capacity development for health professionals including medical doctors, nurses/midwives, and medical technicians. The remaining cases/projects were focused on dealing with specific health issues or diseases such as community health, health system, comprehensive healthcare improvement, MCH/reproductive health, parasite control centers, HIV/AIDS regional control center, TB control, emergency medical care, etc.

As for the 119 cases/projects in which HRH training were done as sub-component, they included projects on MCH/reproductive health, child health, immunization, infectious disease control such as HIV/AIDS, malaria, TB, diarrhea, Chagas disease, projects for health system/primary health care (PHC) improvement, trauma center, improvement of health services through management reform, school health, food safety management, drugs and medical supplies, etc.

In general, Technical Cooperation Projects are aimed at supporting the capacity development of the counterpart agency of the partner country, and therefore, they tend to include some forms of training activities.

#### < Technical Cooperation Project - Science and Technology >

Among the Technical Cooperation Projects that started after FY 2009, projects that are aimed at promoting research cooperation are classified as "Technical Cooperation Project-Science and Technology." 6 such projects have been implemented so far to carry out support for research on topics such as diagnostic technology development, development of therapeutic agents. All of the 6 projects conduct HRH training as sub-component.

#### < Development Study Project >

Out of the 12 cases/projects of Development Study, 9 were aimed at formulating a health sector master plan for the recipient country or target area. All of these projects have training activities as their sub-component, including technology transfer and training programs for counterpart agency staff such as Ministry of Health. Other 3 cases were basic study with no training activities.

#### < Grant Aid Projects >

Out of a total of 14 Grant Aid Projects reviewed, 5 cases/projects had training (technical guidance) on operation and maintenance of the equipment/facilities/system provided by the project, while others had no training activities. All of the 14 projects were

implemented in teaching hospitals and/or core hospitals providing health services at country or regional levels. These hospitals provide grounds for student education (pre-service education) and in-service training for HRH, and therefore, provision of equipment and facilities under Grant Aid Projects is expected to contribute much to the recipient country's human resource and capacity development in health sector. Some of these projects have been implemented in coordination with other JICA operations, such as Technical Cooperation Projects, dispatch of short-term/long-term experts, acceptance of training participants to Japan, Third-country training, and dispatch of JOCVs.

< Individual Projects (dispatch of experts) >

The study reviewed activities of 27 experts who had been deployed since June 2008 until now. Out of the 27, 9 cases were found to carry out training as sub-component, while 18 cases were unclassifiable.

< Individual Projects (dispatch of experts)- science and technology >

Only one person has been deployed since June 2008 as science and technology expert/researcher, and the mission was to develop new diagnostic methods for arbovirus infections at Kenya Medical Research Institute (KEMRI). Training has been carried out as sub-component in this project.

< Individual Projects (Country Focused Training) >

24 cases of country focused training in health sector have been implemented since June, 2008, all of which with a main focus on training. There are three types of locations where JICA's training are carried out, i.e., in-country (in recipient countries), Japan, and third-country. Locations of training programs are decided according to security situation of the recipient country, and/or other considerations such as utilization of resources that had been built up through past cooperation in the third country.

The followings are some examples of in-country training and training in Japan:

In-country training

Country	Period	Project Title
China	2009.8-2011.7	Training Course for Comprehensive Capacity Development of Nurses
Iran	2009.4-2010.12	Strengthening managerial setting of Emergency preparation and response
Lesotho	2009.4-2012.3	Strengthening Monitoring and Evaluation Capacity for HIV/AIDS Response Programs
Swaziland	2009.4-2012.3	Strengthening Monitoring and Evaluation Capacity for

		HIV/AIDS Response Programs
Nigeria	2009.1-2011.3	In-country training on Strengthening TB/HIV Collaborative Activities in HIV Counseling and Testing in TB DOTS Sites and Microscopy Labs
Benin	2010.7-2010.10	The Training for Prevention of Post Partum Bleeding in Atlantique Region
Burkina Faso	2010.6-2010.7	Maternal and Child Health for French-Speaking African Countries
Morocco	2008.11-2011.3	The Project of Improvement of Maternal and Child Health Care at Errachidia Province

#### Training in Japan

Country of participants	Period	Project Title
Afghanistan	2009.4-2012.3	Medical Education
Iraq	2010.4-2011.3	Capacity Development for Medical Staff and Administrators
Yemen	2010.1-2012.2	Training Course for Medical Equipment Management
Serbia	2010.4-2012.3	Technical Training Course for Promotion of Management System of Mass Examination for Early Detection of Breast Cancer in Serbia
Solomon Islands	2010.4-2014.3	Lifestyle-Related Diseases (LSRD) Prevention

#### < Third-country Training >

Third-country Training is a type of training of JICA where participants are invited for training not in Japan but in a third-country. It is intended to make use of the resources in the third country that had been brought by JICA's technical cooperation in the past, and provide training for countries of assistance at present. All of the 14 cases reviewed were fully focused on training.

The followings are some examples of third-country training:

Location of Training	Country of trainees	Period	Project Title
Indonesia	Afghanistan	2008.12-2011.3	Community Health
Thailand	Botswana, Kenya, Tanzania, Uganda, Zambia	2008.10-2011.3	International Training Course on STIs Case Management Skills
Fiji	Fuji, Tonga, Vanuatu	2010.10-2013.7	The Project for Strengthening the Need-Based In-Service Training for Community Health
Brazil	Portuguese-speaking African countries (Angola, Mozambique, Guinea-Bissau, Sao Tome and Principe, Cape Verde)	2010.10-2015.3	Training Course on Tuberculosis Managing for PALOPs
Brazil	Brazil, Central &	2010.8-2015.3	Training Course on Humanized

	South America, Caribbean countries, Portuguese-speaking African countries		Care for Mother and Newborn
Egypt	Palestine	2010.10-2013.3	Total Quality Management for Health Care Facilities for Palestinians
Egypt	Egypt, African countries.	2009.10-2012.3	Woman's Health across Life Span for African Nurse Leaders Phase 2
Tunisia	Tunisia, French-speaking African countries	2009.6-2012.3	Reproductive health and prevention of HIV/AIDS
Senegal	Senegal, Benin, Burkina Faso, Mali, Niger, Guinea, Togo, Côte d'Ivoire, DR Congo	2008.10-2013.3	Training for Teachers of Nurse-Midwife Schools in the West Africa

#### <JICA Partnership Program (JPP)>

JPP is a technical cooperation program intended to support assistance activities and projects of Japanese NGOs, universities, local governments, and public corporations that are planned and implemented in developing countries with full use of their skills and experience. There are three types of assistance in JPP: "Support Type"; "Partner Type" and; "Proposal Type." "Partner Type" is mainly for NGOs, universities, and public corporations with little experience in international cooperation, for projects with a total budget of 10 million yen or less. "Partner Type" is for experienced NGOs, universities, and public corporations for projects with a total budget of 50 million yen or less. "Proposal Type" is specifically for local governments.

Out of the total of 61 JPP projects, 15 cases (25%) were found to have main focus on training, while 41 cases (67%) carried out training as sub-component. The remaining 5 cases were unclassifiable.

### 3-3 Administrative level of cooperation

In this study, 343 cases (projects) were classified according to the following 5 categories/criteria: "regional projects covering two or more countries in the region"; "country level projects covering activities at country level"; "state level projects with activities at state or two or more provinces"; "provincial/capital level projects targeting provincial/metropolitan area levels" and; municipal level projects at municipality/county/district levels." Projects to support human resource development at country level and/or research on development of treatment guidelines by core hospitals and research institutions are classified as "country level projects." It should be noted,

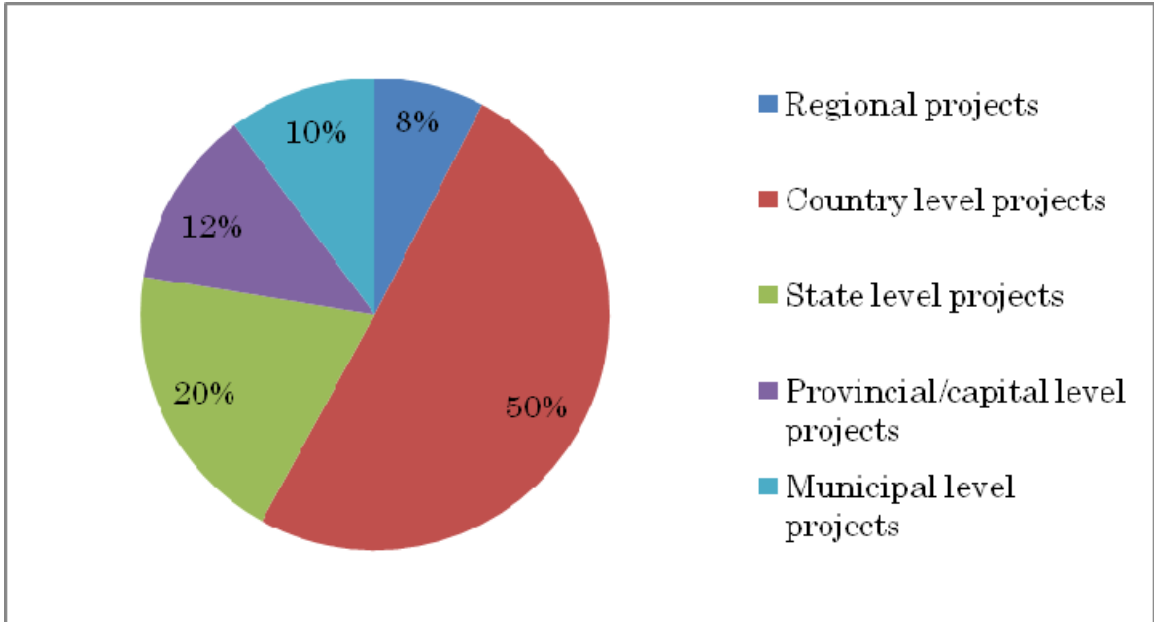


however, that there were difficulties in classifying the administrative scale and geographical coverage of some projects from information in the project summary sheet.

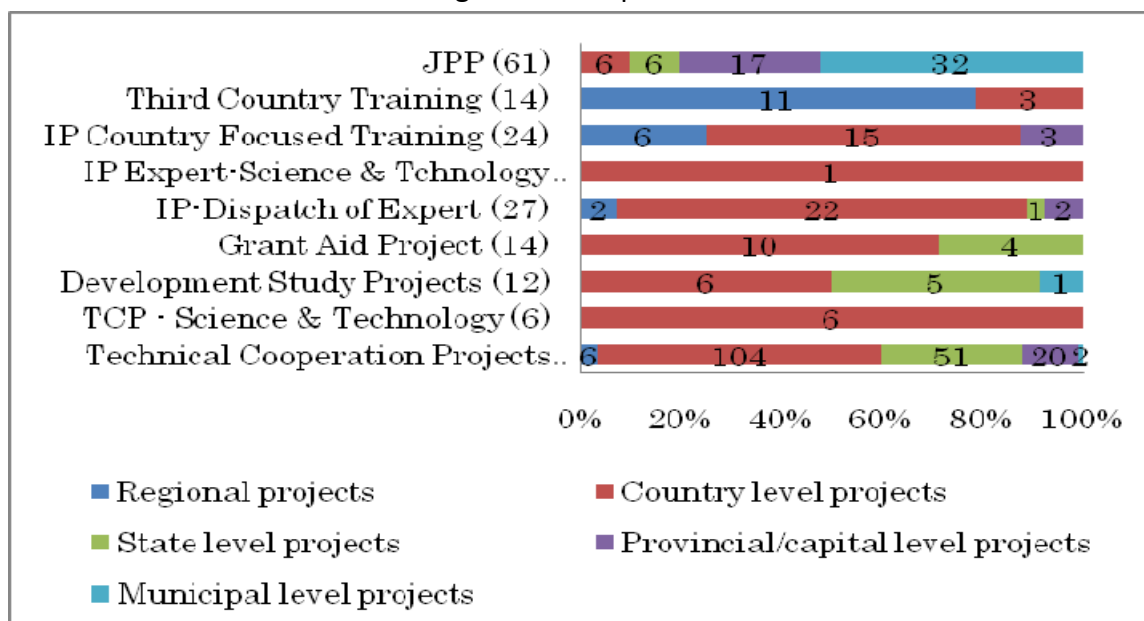
Table 4 Administrative Level of Cooperation

	No. of cases	%
Regional projects	26	8
Country level projects	173	50
State level projects	67	20
Provincial/capital level projects	42	12
Municipal level projects	35	10
Total	343	100

Figure 3 Administrative Level of Cooperation by percentage  
Total caseload



According to JICA cooperation schemes



As a whole, 50% of the total caseload is carried out at country level, followed by state level at 20%.

According to JICA cooperation schemes, 32 out of 61 cases (52%) of JPP projects were implemented at municipal level while 11 out of 14 cases (79%) of Third- country Training were regional projects. As for Technical Cooperation Projects, Grant Aid projects, individual projects (dispatch of experts and country focused training), high proportion of cases were implemented at country level. Technical Cooperation Projects- Science and Technology and individual projects (dispatch of experts)- Science and Technology were classified as country level projects as they support research and development activities by research institutions at country level.

In addition, following 3 categories were used to classify all projects/caseload according to their approach levels of intervention: policy level; clinical level, and; management (and operations) level<sup>6</sup>. 57% of the caseload was implemented with combination of two or more (multiple) levels, such as clinical and management levels (Table 5, Figure 4 Total caseload).

<sup>6</sup> Here, policy level projects refer to cases with focus on planning/formulation/revision of policies/strategies/program, and/or budget planning/execution, etc. at central or local levels. Clinical level projects are those with main focus on prevention and treatment activities. Management level projects refer to projects with emphasis on activities relating to operational management, logistics, monitoring/evaluation, etc.

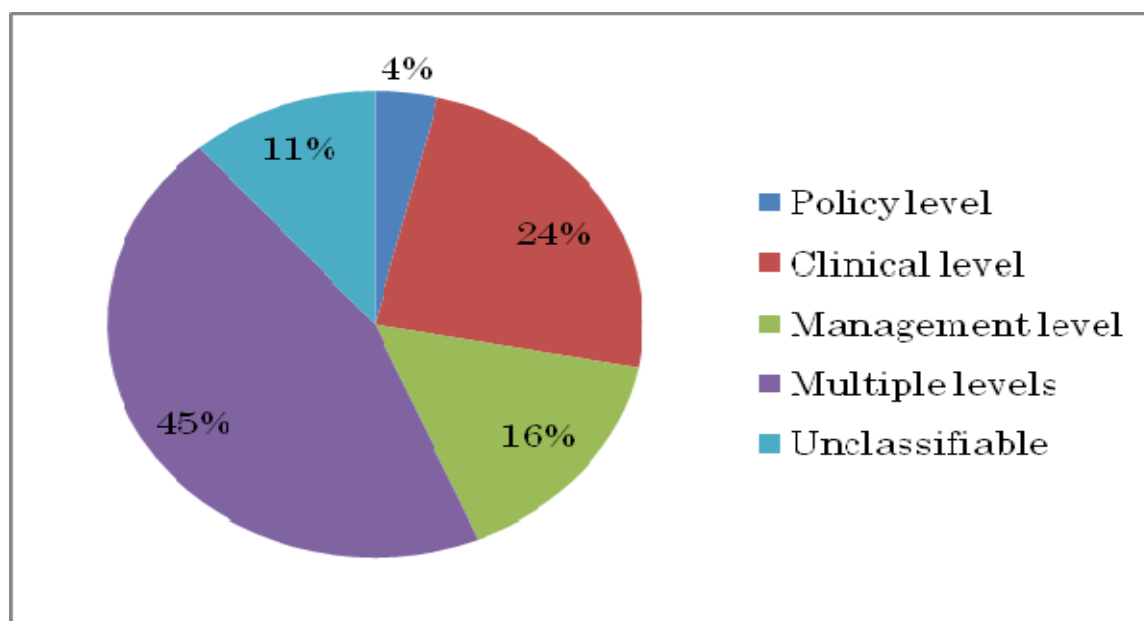
Table 5 Approach levels of cooperation

Interventions at:		No. of cases	%
Policy level only		13	4
Clinical level only		83	24
Management only		54	16
Multiple levels	Policy level + clinical level	4	1
	Policy level + clinical level + management level	33	10
	Policy level + management level	28	8
	Clinical level + management level	89	26
Unclassifiable		39	11
Total		343	100

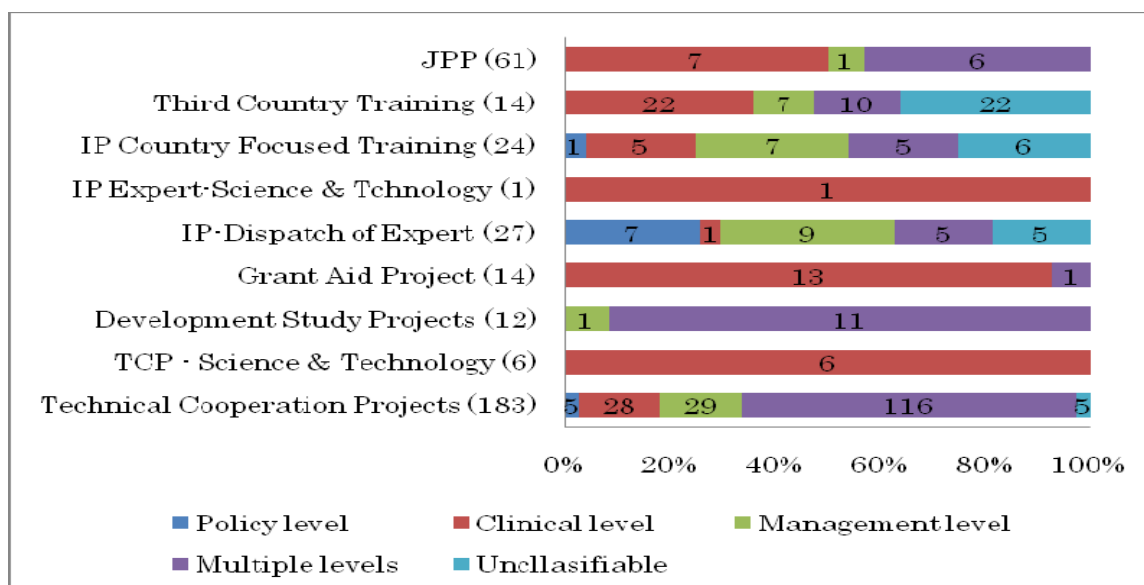
According to JICA cooperation schemes, there is a tendency among Technical Cooperation Projects and Development Study projects to be implemented at multiple levels. On the other hand, high percentages of Technical Cooperation Projects- Science and Technology and Grant Aid projects are targeting interventions at clinical level.

Figure 4 Approach levels of intervention by percentage

Total caseload



### According to JICA cooperation schemes



### 3-4 Types of education supported by JICA

In this study, each case was sorted out according to the type of education it served. Review and analysis was carried out for all 343 cases despite the fact that 45 of these cases were unclassifiable due to lack of information from the project summary sheets (see Table 3). This was done because some of the unclassified cases did contribute to training and education of HRH through activities relating to construction of facilities, maintenance of equipment, etc. For the purpose of classification and analysis, following categories and operational definitions are used as agreed among those involved in the Study. Pre-service education refers to education to train health professionals. Training for health volunteers and cases where types of activities and their contribution to training and education are unclear from the project summary sheets were included in “unclassifiable” category.

Figure 5 Operational definitions for HRH education

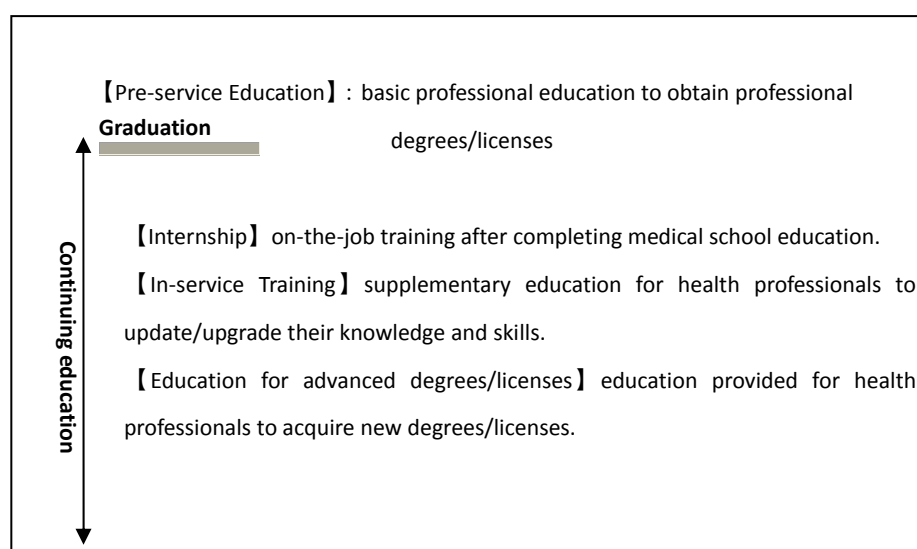
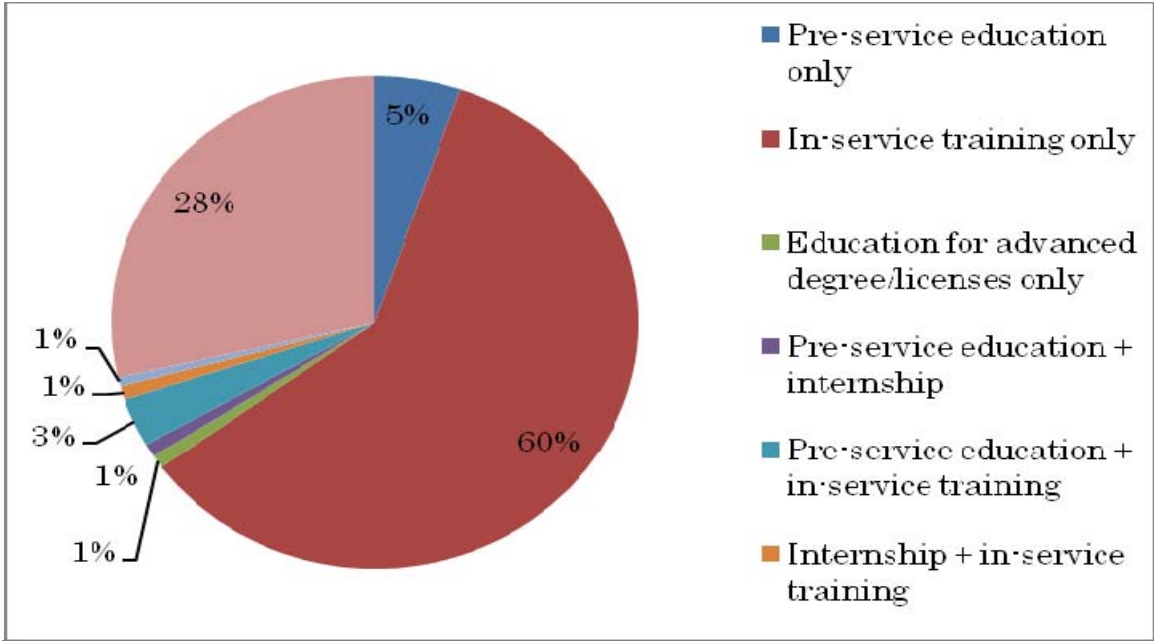


Table 6 6 summarizes the number and percentage of cases/projects according to the above-mentioned categories. Among the total caseload of 343, 205 projects (60%) provided support for in-service training alone. Combined with those that focus on in-service training and pre-service education and/or internship, a total of 221 cases (64%) supported in-service training. Number of cases that provided some support for pre-service education alone or in combination with other types of education stood at 34 projects (10%).

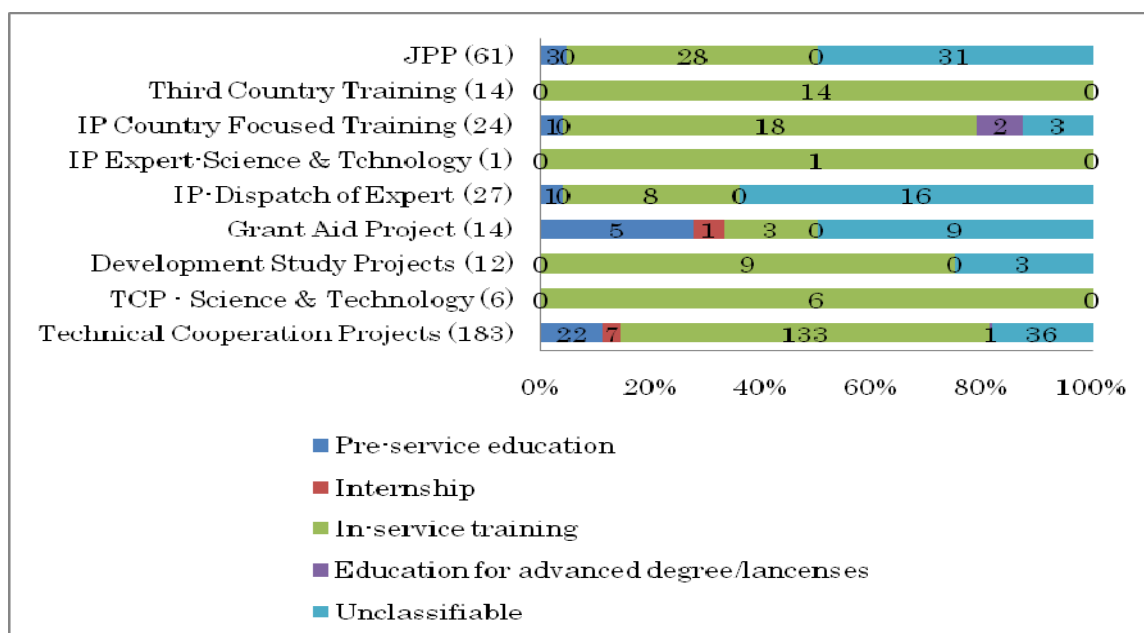
Table 6 Breakdown on cases according to types of education supported by JICA

Categories/types of education	No. of cases	%
Pre-service education only	18	5
Internship only	0	0
In-service training only	205	60
Education for advanced degree/licenses only	3	1
Pre-service education + internship	3	1
Pre-service education + in-service training	11	3
Internship + in-service training	3	1
Pre-service education + internship + in-service training	2	1
Unclassifiable	98	29
Total	343	100

Figure 6 Types of education supported by JICA by percentage  
Total caseload



According to JICA cooperation schemes



Note: There were multiple entries in data relating to JICA cooperation schemes. Therefore, the number of projects as in the above diagram exceeds the total caseload of 343 projects.

According to JICA cooperation schemes, Technical Cooperation Projects, Development Study projects, individual projects (Training in Japan and In-country training), and Third-country training schemes tend to have high percentage of projects/cases that support in-service training. In particular, all the Third-country training projects supported in-service training (Figure 6 According to JICA cooperation schemes). Cases that support pre-service education are those implemented under Technical Cooperation Projects, Grant Aid projects (improvement of training institution facilities/provision of equipment), and JPP schemes. Support for education for advanced degrees/licenses were carried out by two projects under Individual projects (Training in Japan and In-country training) scheme. In addition, there were some cases where counterpart personnel and Third-country training participants of the Technical Cooperation Projects were sent to take part in extended Training in Japan in order to acquire advanced degrees/licenses<sup>7</sup>.

### 3-5 Professionals targeted for training / education

The breakdown of professions that were targeted for training/education by 343 projects is summarized in Table 7 and Figure 7.

<sup>7</sup> Refer to review and analysis of Training Program in Japan.

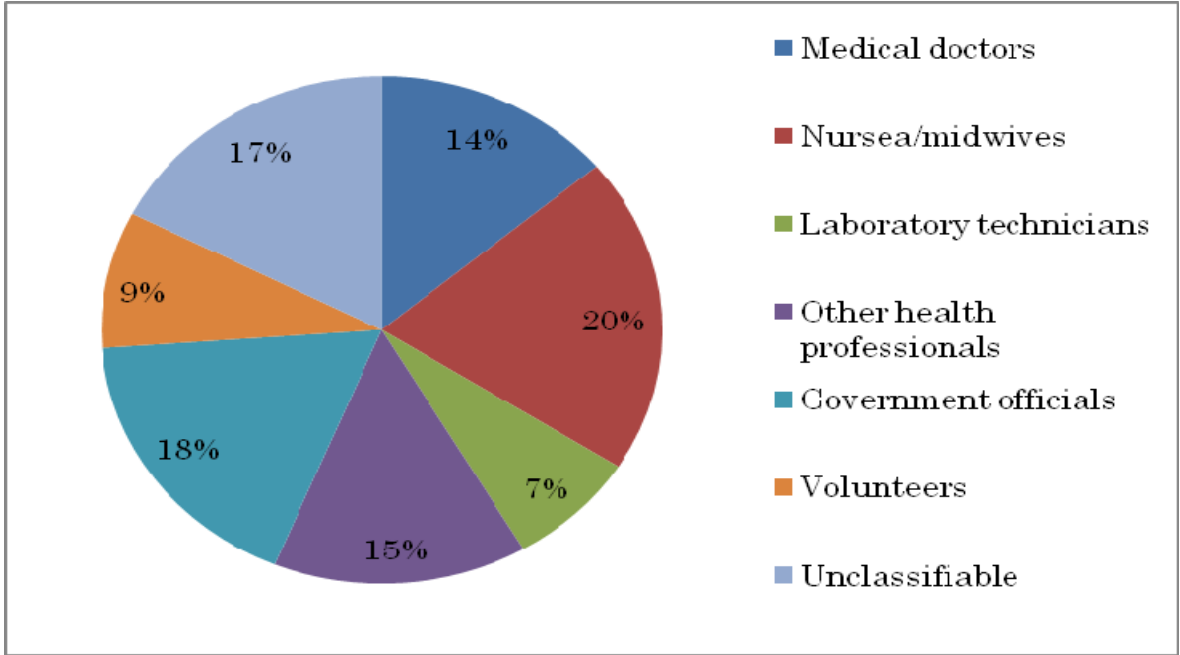
The number of projects that included the training of nurses/midwives was the highest at 102, followed by those of medical doctors.

According to JICA cooperation schemes, Technical Cooperation Projects denote the same tendency of outcome as in the case of analysis of the total caseload. On the other hand, more support is provided for government officials in Development Study projects. With regard to Third-country training projects, medical doctors, nurses and other health professionals is the main target of training/education. (Figure 7 According to JICA cooperation schemes) .

Table 7 Breakdown of professions targeted for training/education

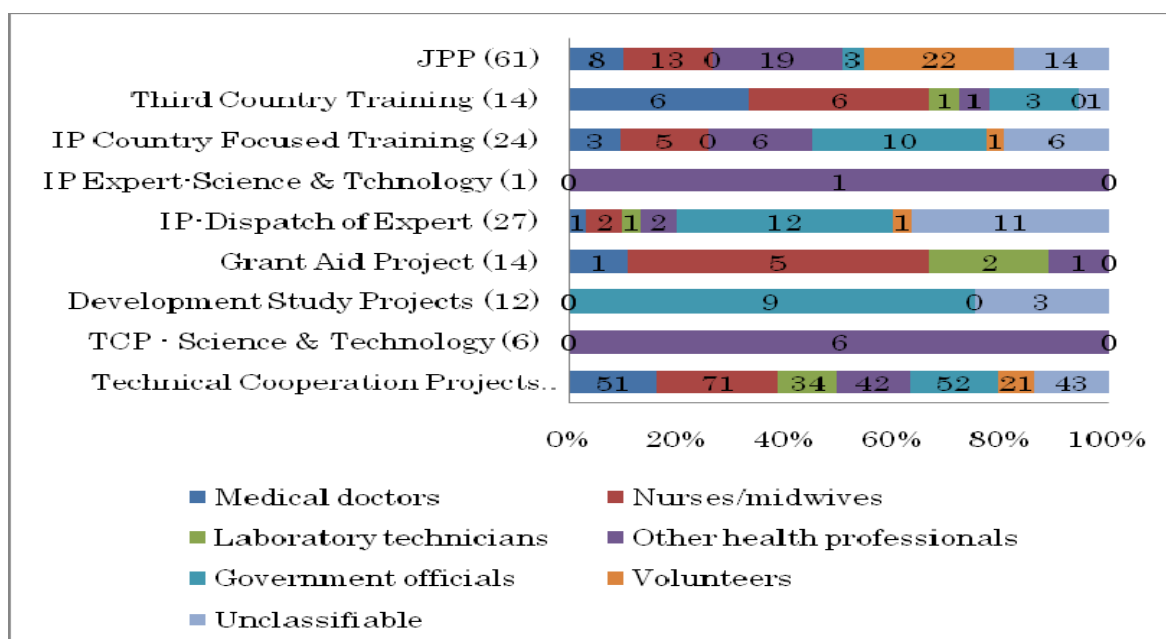
Professions (multiple selection)	No. of cases
Medical Doctors	70
Nurses/Midwives <sup>8</sup>	102
Laboratory Technicians	38
Other health professionals	74
Government officials	89
Volunteers	44
Unclassifiable	88
Total	505

Figure 7 Professions targeted for training/education by percentage  
Total caseload professions



<sup>8</sup> Nurses and midwives were counted together in one category as some countries do not separate these two professions clearly.

### According to JICA cooperation



Note: As multiple entries were made, there are some overlaps in the statistics.

### 3-6 Content of support for training / education

Contents of support for training/education generally include topics relating to (1) professional certification and system development, (2) HRH and training database development, (3) training course development and training standards/curriculum/teaching material development, (4) operations & management (including public sector management, hospital management, and training management), (5) Training of Trainers (TOT), and (6) improvement of work environment, facilities and equipment.

All 343 cases/projects were reviewed and classified according to the 6 topics (categories) based on their contents of support for training/education (Table8, Figure 8). Cases that were difficult to tell from the project summary sheets were included in “unclassifiable (0)” category.

Table 8 Contents of support for training/education

Contents of support (multiple selection)	No. of cases
(1) Professional certification and system development	3
(2) HRH and training database development	17
(1) Training course development and training standards/curriculum/teaching material development	84
(4) Operations & management	149
(5) TOT ( Training of Trainers)	72

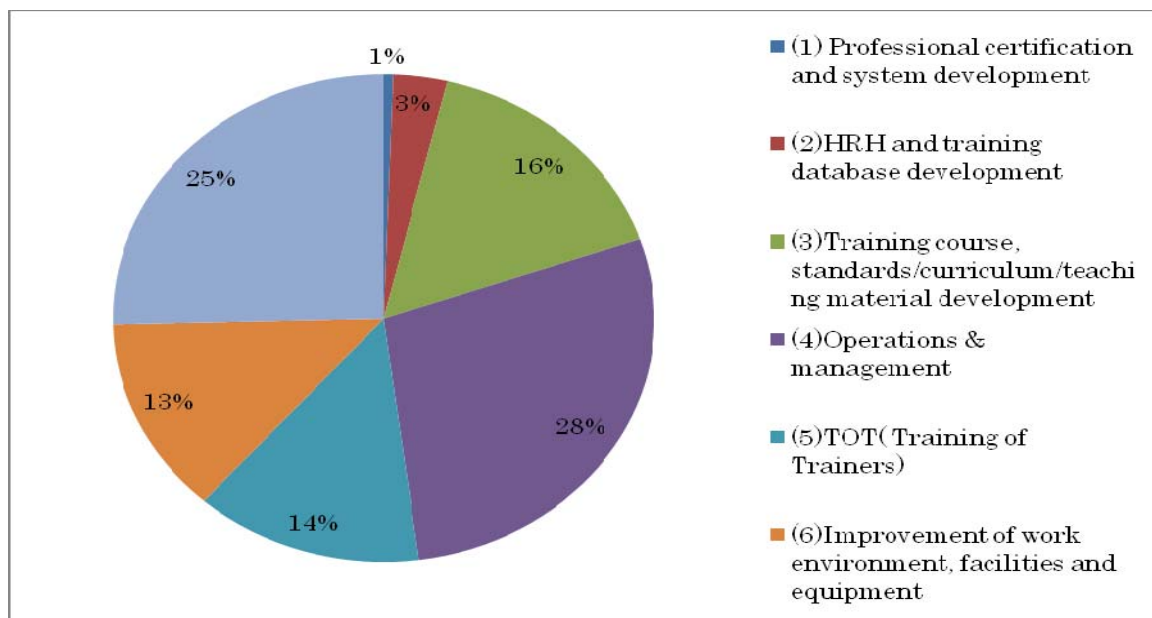


(6) Improvement of work environment, facilities and equipment	69
(0) Unclassifiable	134
Total	528

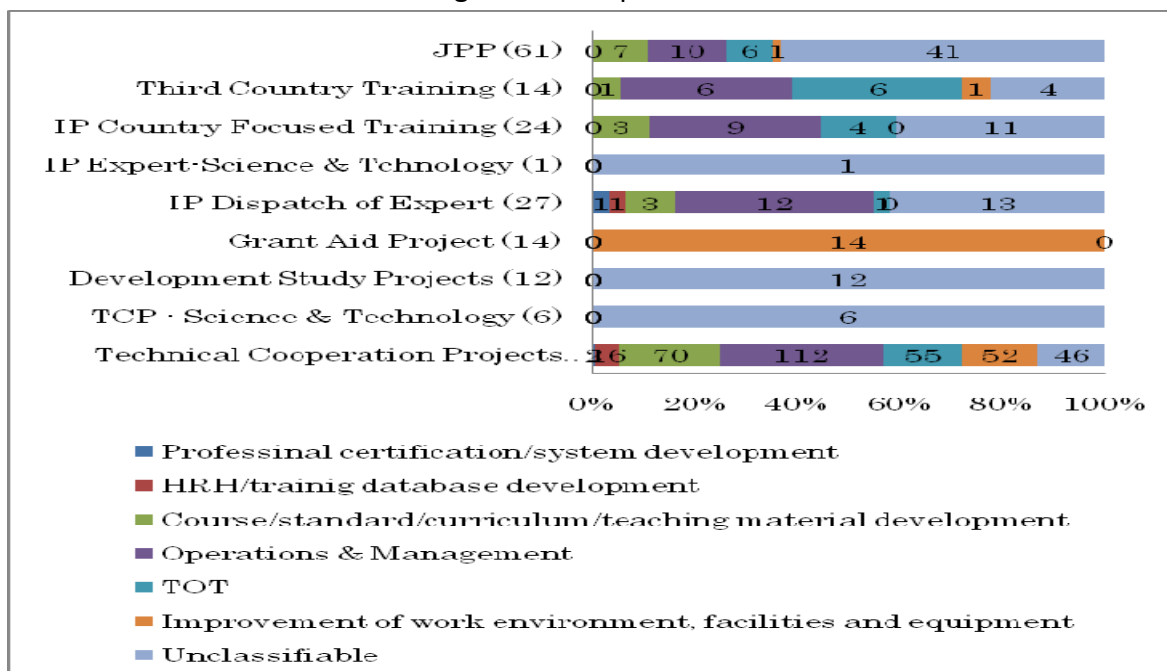
As a whole, the most common type of support for training/education was relating to (4) operations & management, followed by (3) training course development and training standards/curriculum/teaching material development, (6) improvement of health environment, facilities and equipment, and (5) TOT (Figure 8: Total caseload) .

As regards the outcome of analysis according to JICA cooperation schemes, only Technical Cooperation Projects included support for professional certification and system development, and the breakdown is almost the same as that of the total caseload. Contents of support in Development Study projects were not clear (unclassifiable) from the project summary sheets. With regard to Grant Aid projects, training/education support were provided mainly on issues relating to improvement of work environment, facilities and equipment. (Figure 8: According to JICA cooperation schemes) .

Figure 8 Contents and topics of training/education by percentage  
Total caseload



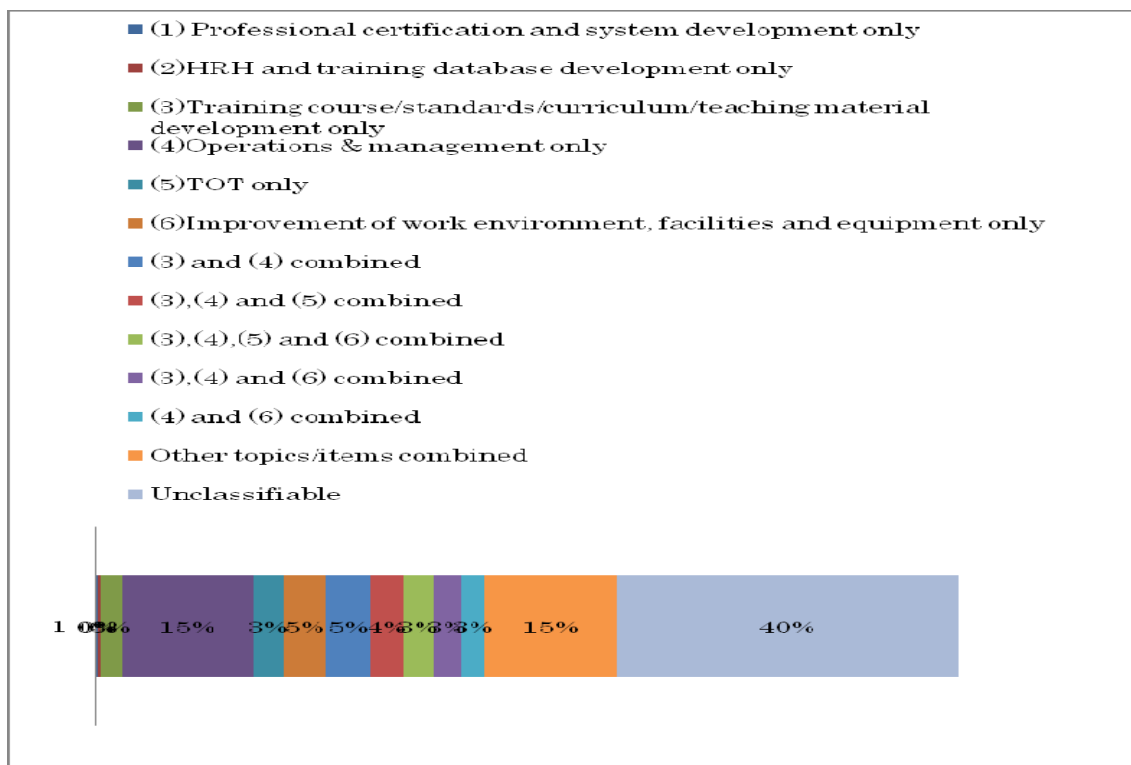
### According to JICA cooperation schemes



Note: As multiple entries were made, there are some overlaps in the statistics.

116 cases/projects (34%) were implemented with support on multiple topics, whereas the number of projects with support on single topic only was low. In addition, high percentage (40%) of cases/projects was unclassifiable. Among the projects that carried out support on single topic only, 15% was on operations & management. As for projects with activities on multiple topics, common combinations were to have "training course development and training standards/curriculum/teaching material development" and operations & management as main topics, and have "TOT" and/or "improvement of health environment, facilities and equipment" (Figure 9) .

Figure 9 Combination of topics of training/education by percentage



### 3-7 Support for mitigation of HRH shortages

#### (1) Overall trend

According to the conceptual framework of WHO, the causes of HRH shortages can be analyzed according to three stages of the “working lifespan” of the health workforce. Specifically, the three stages cover the following domains: Entry Stage (issues on how to secure the sufficient numbers of qualified health workers. This is linked to shortfalls in planning/policies on the development of HRH, weakness in pre-service education, lack of recruitment opportunities, etc.); Workforce Stage (issues relating to inadequate management and supervision, compensation, work environment, lifelong learning opportunities, etc.) and; Exit Stage (issues on how to manage workforce attrition and loss due migration, retirement, illnesses, conflicts, etc.) (Figure 10) .

Figure 10 Causes of HRH shortages according to working lifespan of health workforce

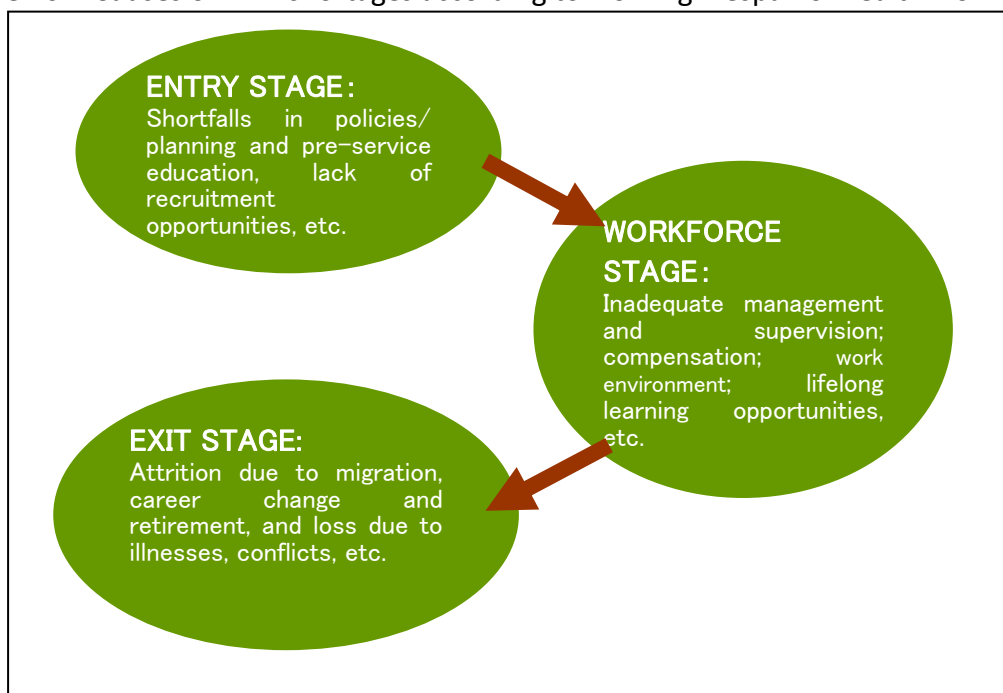


Figure made by the Human Development Dept. of JICA with reference to WHO: World Health Report 2006 “Working together for health”, Geneva, 2006

This study reviewed the caseload of 343 cases/projects and classified them into the three domains based on the stage to which they responded (Table 9, Figure 11: Total caseload) . For cases/projects that focused on training and employment of volunteers to mitigate HRH shortages in remote areas and for community activities, they were classified as cases responding to issues at Entry Stage.

Large numbers of JICA projects were trying to respond to issues at Workforce Stage. Many of them were focused on improving lifelong learning opportunities; management and supervision, and; work environment. Some cases/projects carry out support to improve safety measures such as prevention of infections through mishandling of blood at health facilities as well. With regard to projects/cases responding to Entry Stage issues, many projects provided support to improve and expand pre-service education. The number of cases/projects was small for those dealing with Exit Stage issues, however, there are cases to mitigate serious HRH shortages in countries affected by conflict, as well as projects to support the development and planning of HRH.

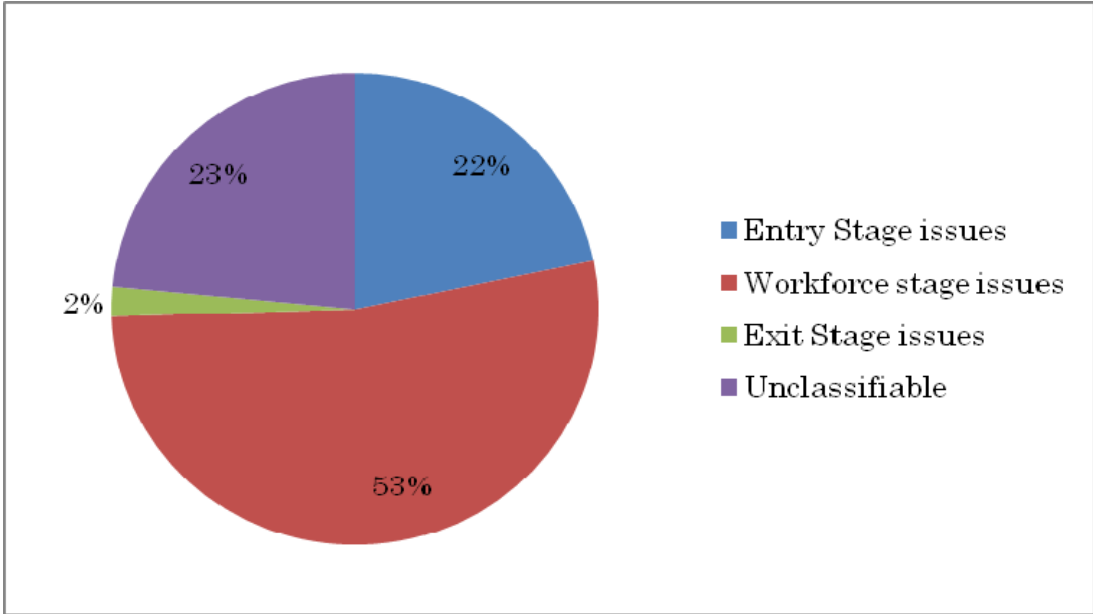
According to JICA cooperation schemes, the outcome of analysis of Technical Cooperation Projects was in line with that of the total caseload. As for Development Study projects, it

was found that they surveyed both Entry Stage and Workforce Stage issues as they formulate various health master plans. However, it was not possible to discern from the Development Study project summary sheets if Exit Stage issues were dealt with in these surveys. With regard to Grant Aid projects, Entry Stage issues were mitigated through activities relating to improvement of facilities and equipment of training schools, while Workforce Stage issues were dealt with through the improvement of work environment by upgrade of, and provision of equipment to health facilities. Almost the same proportion of cases/projects in JPP provided support for issues relating to Entry Stage and Workforce Stage. In addition, most of the Third-country training projects addressed Workforce Stage issues by conducting in-service trainings (Figure 11: According to JICA cooperation schemes) .

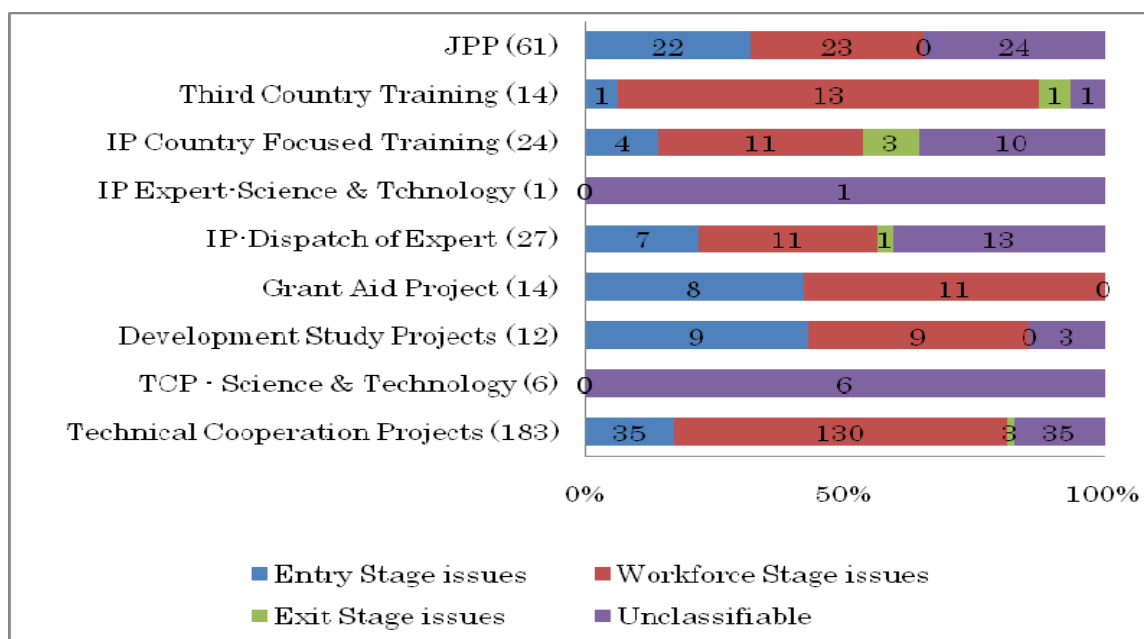
Table 9 Causes of HRH shortages

Causes of HRH shortages (multiple selection)	No. of cases
Entry Stage issues	86
Workforce Stage issues	209
Exit Stage issues	8
Unclassifiable	93
Total	396

Figure 11 Causes of HRH shortages by percentage  
Total caseload



According to JICA cooperation schemes



Note: As multiple entries were made, there are some overlaps in the statistics.

(2) Case examples

Typical examples of JICA projects in dealing with issues relating to HRH shortages are illustrated in this section.

< Support for HRH development policies and strategy development >

Basic approach of JICA cooperation is for all activities to be implemented within the existing policy and public administration frameworks of the recipient country. The following case is an example of support to develop policy and planning of HRH based on this approach.

Project title	Approach and outcome of JICA cooperation
Dispatch of Individual Experts to Tanzania "Cooperation Planning in Health Sector" (2005-2007)	<ul style="list-style-type: none"> <li>Based on the outcome of the basic study on the country's health sector, the project supports the Division of HRH development, a key actor in development and management of HRH, and provides technical support to HRH development policy and planning Department.</li> <li>The project supported the formulation of "Human Resources for Health Strategic Plan II (2008- 2013)." In order to implement this Strategy, a report was consolidated with the aim of clarifying the status and issues relating to the HRH</li> </ul>

	<p>system and presenting advice and recommendations for the reform. In this report, the situation concerning donor support for HRH and its coordination mechanism were analyzed. The report also made recommendations for Japan to provide support specifically in the fields of “capacity development of policy and planning in HRH” and “training and capacity development of health staff” within the overall HRH Strategy<sup>9</sup>.</p>
--	--

<Support for pre-service education system >

In responding to issues relating to weakness in pre-service education, JICA implemented projects to improve the education of health professionals such as medical doctors, nurses/midwives, laboratory technicians, X-ray technicians, etc., in terms of quality and quantity. More cases/projects are focused on improving the quality of education rather than increasing the number of health professionals.

In some of the typical projects of JICA, activities to develop capacities of individual teachers/trainers and improve management and operations of educational institutions are carried out on one hand. On the other hand, activities to support the establishment of education system is done by setting standards for opening of new schools and incorporating such activities into the country’s health policies.

Project title	Approach and outcome of JICA cooperation
Project for the High Institute of Nursing, Cairo University, Egypt (1994~1999)	<ul style="list-style-type: none"> <li>• The project was implemented with the objective to strengthen the Department of Nursing in order to train and raise high quality nurses.</li> <li>• The project mainly supported activities relating to improvement of curriculum and educational methodology in nursing; TOT (training of trainers); development and improvement of educational media to be used in training and education; skills development in management of the Department of Nursing; and capacity development of trainer nurses at on-the-job nurse training facilities.</li> <li>• Activities were carried out to raise the recognition of the importance of nursing education and to include the nursing system improvement in the country’s health policy.</li> </ul>
Project for the Development of Human Resources in	<ul style="list-style-type: none"> <li>• The objective of the project was to reinforce the training/education system for HRH in order to address the absolute shortage of HRH particularly at primary health care</li> </ul>

<sup>9</sup> Reference was made to the postscript of “Status of HRH system in Tanzania and its development (draft),” Mr. Ishijima, Japanese Expert on Cooperation Planning in Health Sector, Ministry of Health and Welfare, Republic of Tanzania.

Health, Republic of Senegal (2001-2006)	<p>level (nurses, midwives, and community health workers).</p> <ul style="list-style-type: none"> <li>• In addition to supporting the capacity development of the training school, the project supported activities to establish appropriate education/training system for community health workers in the pilot area.</li> <li>• The project supported the development of capacities in financial management and training of nurses/midwives (especially in terms of teachers' capacities and on-the-job training contents) of the target school. This led to the setting of standards for the opening of new private schools in HRH sector.</li> <li>• Organizational support was strengthened by developing close coordination with Technical Advisor (JICA Senior Advisor) who was deployed in the Ministry of Health and Medical Prevention.</li> </ul>
--	--

<Support for lifelong learning (continuing education) system >

Provision of appropriate lifelong learning opportunities contributes to the update of knowledge and skills of HRH and upkeep of staff motivation. Numerous projects and activities have been carried out by JICA and other donors in the field of continuing education, and in-service training, in particular. However, there are some concerns raised over such activities, such as the frequent absence of health staff due to participation in training, unfair training opportunities for staff (some are provided with multiple training opportunities while others are not), insufficient evaluation system to properly measure the outcome of training, sustainability of the training effects, etc.

JICA has implemented projects and activities to respond to such issues. The following cases illustrate JICA's cooperation in establishing the continuing education system, improving management and operation of training based on local needs, and establishing training information system.

Project title	Approach and outcome of JICA cooperation
Project for Strengthening Continuing Education in Nursing and Midwifery in Southern Paraguay 〔2001-2006〕	<ul style="list-style-type: none"> <li>• The project's continuing education program (program framework, training materials, teaching aid, equipment, etc.) and monitoring standards in 4 Southern Provinces were approved by the Ministry of Public Health and Social Welfare and established as a model.</li> <li>• National Institute for Continuing Education for Nursing and Midwifery, which was set up by the project, was approved as</li> </ul>



	<p>“Agency for Continuing Education for Nursing and Midwifery” under the direct supervision of the Vice Minister of Public Health and Social Welfare. This made possible for the Agency (Institute) to request budget on its own.</p> <ul style="list-style-type: none"> <li>• The project submitted a report to the Government on the framework of qualifying examination system for nurses and midwives</li> </ul>
The Bach Mai Hospital Project for Strengthening Training Capacity for Provincial Hospitals in Vietnam (2006-2009)	<ul style="list-style-type: none"> <li>• The project was aimed at improving the training capacity of Bach Mai Hospital particularly with regard to management and operation of training activities in 4 priority areas (total care, emergency medical care, pediatric care, response to hospital infection) and other related fields that are important at the Provincial level. By doing so, the project sought to support the transfer of skills and knowledge of HRH at lower level hospitals.</li> </ul>
The Project for the Improvement of the Maternal and Child Health In-Service Training System and Program in Ghana (1997-2002)	<ul style="list-style-type: none"> <li>• Project supported the establishment of core systems in in-service training in three target provinces, i.e., information system concerning in-service training, course guidelines, and monitoring and evaluation system. Systematic in-service training program was incorporated into the activities of the three provincial health departments and it is functioning. This has reduced the problems of unfair training opportunities for staff.</li> </ul>

<Support for capacity development in management>

In the following case examples, efforts were made to raise the sense of ownership of the recipient country by carrying out activities to increase staff motivation through the visualization of the staff efforts and outcomes.

Project title	Approach of JICA cooperation
Lusaka District Primary Health Care Project (Phase II), Zambia (2002-2007)	<p>&lt; Introduction of 5S-TQM (Seiri: orderliness, Seiton: neatness &amp; tidiness, Seiso (cleaning), Seiketsu (cleanliness) and Shitsuke (good manner) &gt;</p> <ul style="list-style-type: none"> <li>• In the 2<sup>nd</sup> year, the project launched an office improvement campaign and introduced 5S-TQM (Total Quality Management) in order to develop management capacity. An expert on this topic was invited from Japan and a total of 26 small group seminars were conducted with Lusaka District</li> </ul>

	<p>Health Management Team (LDHMT) and Health Center staff within the period of 2 months. Each Health Center formed a team and developed a management and operations improvement plan, which was reviewed every quarter.</p> <ul style="list-style-type: none"> <li>• The project first dealt with a common problem of congestion at outpatient receptions in 6 Health Centers. By placing the clinical record of the current year patients (i.e., frequent visitors) to areas closest to the reception, time spent to look for the records was drastically cut, saving at least 4 hours worth of work per day. This prompted the Health Centers to initiate other actions and activities, such as rearrangement of files and patient archives, improvement in the labeling of drugs, regular polishing of floors, planting of flowers in front of the outpatient receptions, etc.</li> <li>• The project also created opportunities to present the activities of each Health Center, and by doing so, encouraged positive competitions among them and raised staff motivation.</li> <li>• Although 5S was carried out as bottom-up activities, top-level commitment was imperative in smooth introduction and implementation of its activities. The 5S activities were made possible by the strong wish of the Planning and Development Manager, or No. 2 of LDHMT, to improve management capacity of the staff<sup>10</sup>.</li> </ul>
<p>Technical Cooperation in Capacity Development for Regional Referral Health Management in Morogoro Region, Tanzania (2001-2007)</p>	<ul style="list-style-type: none"> <li>• The Japanese Experts involved in the project played a “catalyst role” in developing the management capacity and reinforcing the sense of ownership of the recipient government counterpart agency. This resulted in reinforced counterpart commitment to their own health plans.</li> <li>• The project introduced a number of activities with “customer-oriented” approaches (an important topic in the country’s health sector reform) that were possible for the counterpart agency to implement in practice. For instance, the project implemented activities such as exit surveys to measure patient satisfaction, questionnaires for newsletter readers, questionnaires for internet homepage users, etc. It was the first opportunity for the Regional and Council Health Management Team to learn about the views of the local residents on their performance, and these activities made impacts on the minds and attitudes in terms of provision of health services of the staff. <ul style="list-style-type: none"> <li>• The project also introduced a working group system</li> </ul> </li> </ul>

<sup>10</sup> Reference was made to “Research on institutional development through ‘Total Quality Management (TQM) methodology’ in health sector (2005)”, “Reference Edition: 5S Activities in Zambia,”, Sonoyama, S.

	<p>where groups are formed according to each task, with the election of a leader for each group. This resulted in improved motivation among the staff as whole by (1) improved recognition of the roles among the representative of each organization, (2) acceleration of instances of skills transfer, (3) improved communication among the representatives of Regional and Council Health Management Team, and (4) having a forum that allow them to compete their performances. In addition, since the formation of the working groups, the number of project activities and their achievement/output grew dramatically, making positive contributions in the increase of effectiveness and efficiency of the project.</p>
--	--

### 3-8 Dispatch of Japan Overseas Cooperation Volunteers (JOCVs)

#### (1) Target data and review methods

All information on JOCVs registered with FileMaker database as of December 30, 2010 was targeted for review, and data compilation/analysis were carried out.

Following categories were used to sort out data:

- Health sector - number of personnel dispatched (according to professions)
- Health sector - number of personnel dispatched (according to professions/timing)
- Planning/Public administration - health related

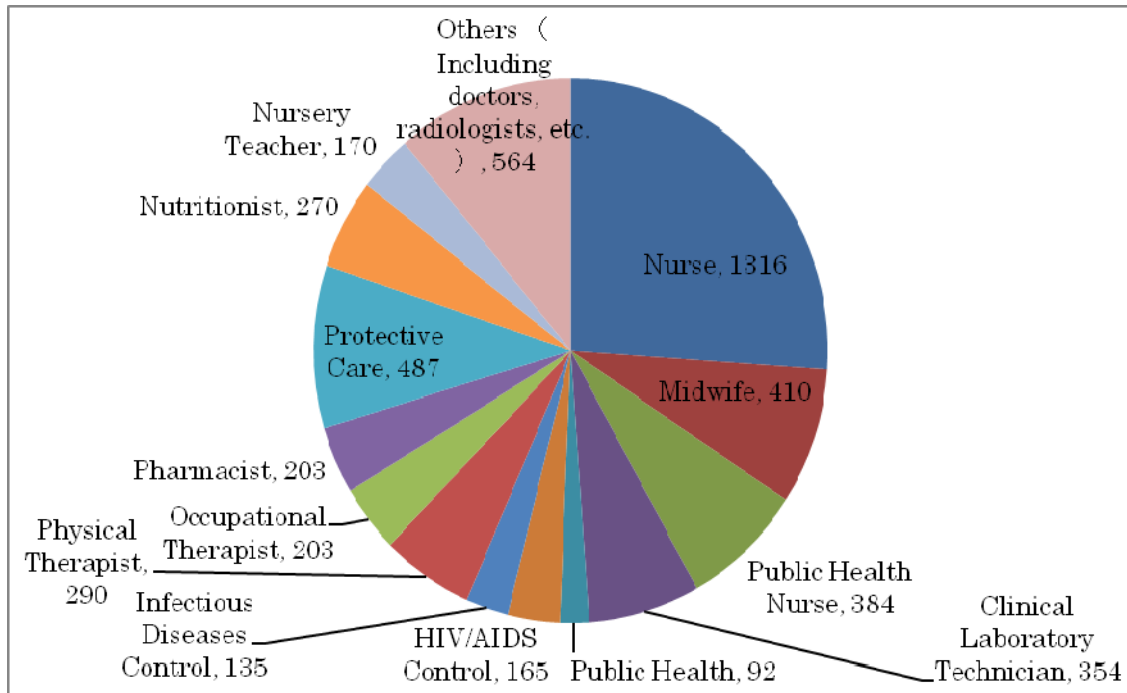
#### (2) Outcome of the review

Dispatch of JOCVs in health sector began with a dispatch of a medical doctor to Laos in March 1966. As of December 2010, a total of 5,043 persons had been deployed in total of 93 countries under this program.

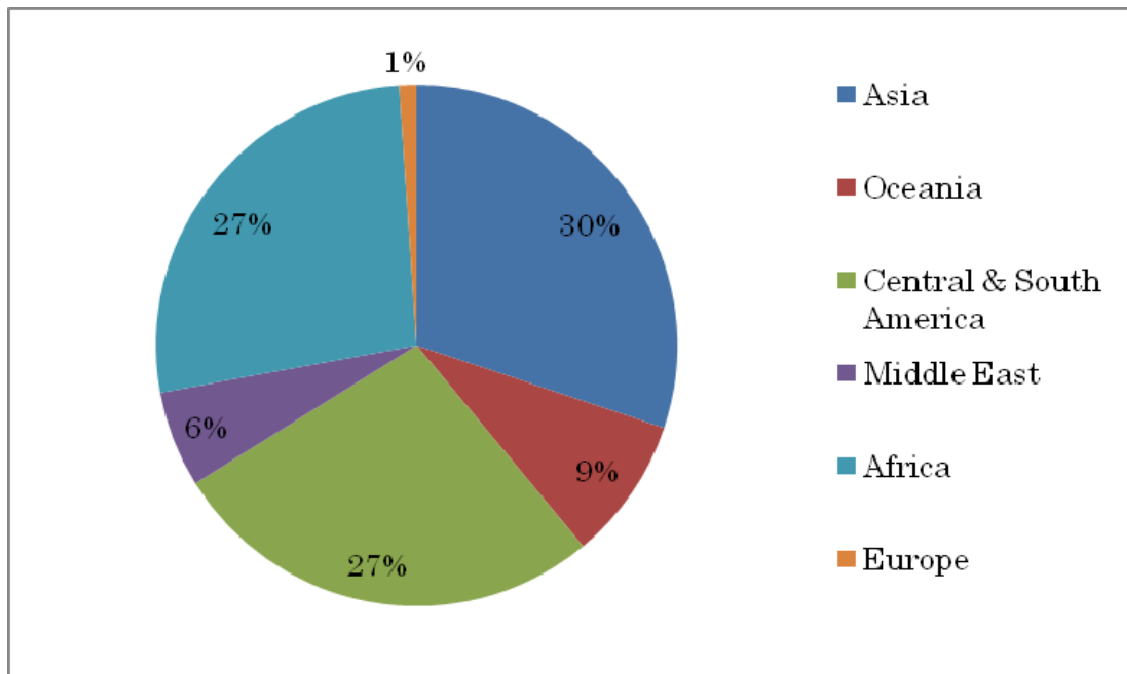
According to professions, nurse accounts the most, with 26% or 1,316 persons of all the JOCVs dispatched. This is followed by 410 (8%) midwife, 384 (8%) public health nurse, and 354 (7%) clinical laboratory technician.

According to regions, largest number of JOCVs, 1,519 persons or 30% has been dispatched to Asia. This is followed by 1,369 persons (27%) to Central and South America, 1,353 (27%) to Africa, 447 (9%) to Oceania, 301 (6%) to Middle East, and 54 (1%) to Europe.

Figure 12 Dispatch of JOCVs in Health Sector  
By profession



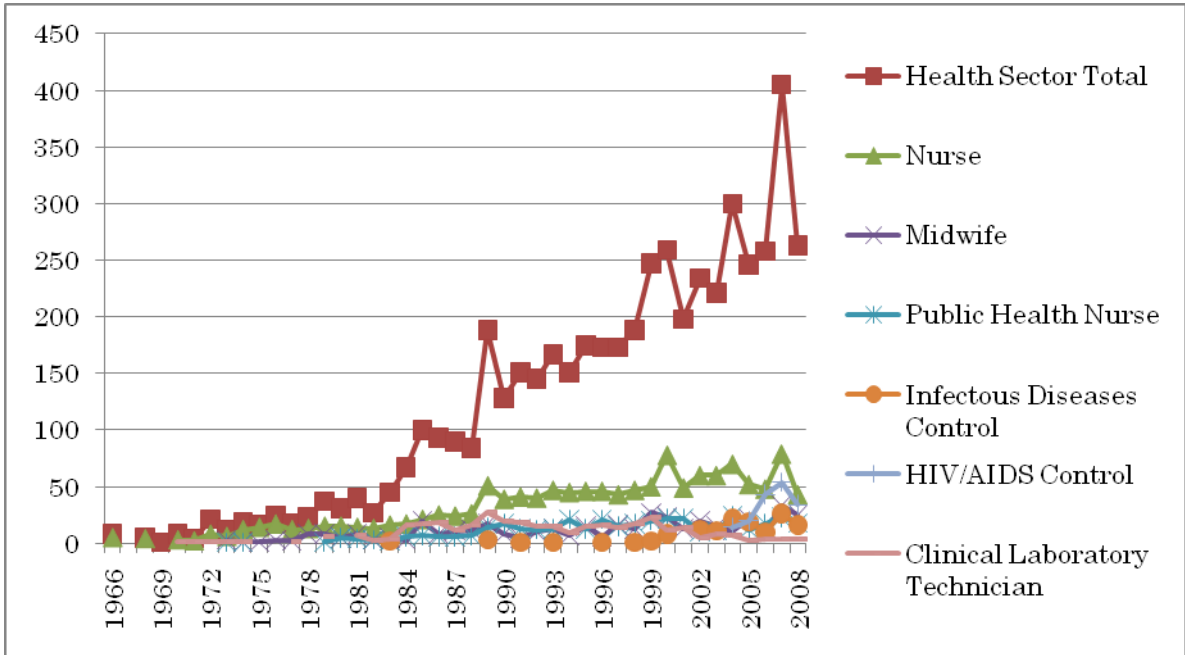
By Region



The dispatch of JOCVs in health sector activities is on the rise. Since 2000, there has been an increase in the number of JOCVs to deal with infectious disease control. In 2004,

deployment of volunteers in the field of HIV/AIDS control began. Both are contributing to the increase in number of JOCVs in health sector. Deployment of nurse, public health nurse, midwife, is also slowly on the rise.

Figure 13 Dispatch of JOCVs in Health Sector (by FY)



In the field of planning and public administration, number of JOCVs deployed in health-related activities accounted for 29 persons to date. With the introduction of information technology, computerization of public administration systems began in developing countries in 1990’s, and the dispatch of volunteers in computer technology also began. There was no exception of this trend in health administration. In 1993, a computer technology volunteer was dispatched to the Sanitation Information Research Division of the Ministry of Health, Morocco, to develop, implement, and maintain various statistical programs of its health and sanitation projects. Since then, JOCVs in computer technology, statistics, environment, visual media, etc. have been deployed in 18 countries including Ghana, Bangladesh, Côte d’Ivoire, Niger, Costa Rica, and Dominican Republic. More recently, deployment of such personnel is done in coordination with JICA’s Technical Cooperation Projects and dispatch of individual experts.

**3-9 Training in Japan**

(1) Training courses and review methods

Course outlines of all the courses in health sector planned for Training Program in Japan in

FY2008 were reviewed/analyzed. There were 76 of such training courses, including group training, training by regions, and long-term training. A total of 665 trainees (participants) were expected to take part in training in Japan during FY2008.

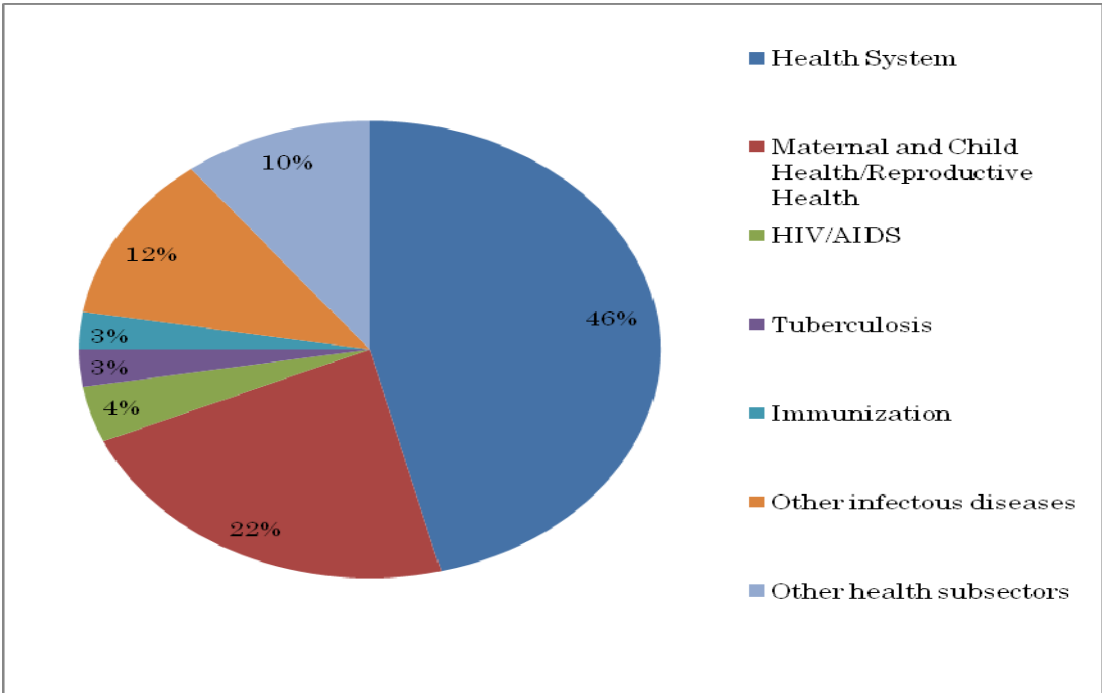
Following categories were used to compile and analyze data:

- \* Topic of training (sub-category)
- \* Type of training
- \* Regions from where the training participants are invited
- \* Organizations/Professions targeted for training and education
- \* Level (contents) of training
- \* Number of participants invited for each course
- \* Duration of training
- \* Availability of linkage with other JICA's assistance projects/programs such as Technical Cooperation Projects

(2) Outcome of the review

As regards the topic of training (sub-category), courses relating to health systems account the most with 46%, followed by those on maternal and child health (MCH) /reproductive health (22%) (see Figure 14).

Figure 14 Topic of Training (sub-category)



With regard to training type, group training which does not limit participants according to country or region comprises more than half of all courses (58%), followed by training by region (35%). Courses for long-term training account for only 7% of all training courses (see Figure 15).

As for the regions, 47% of the courses were open to all regions. This is followed by courses for Africa (17%), Asia (8%), Central and South America (7%), and Middle East (5%) (see Figure 16).

Figure 15 Type of Training

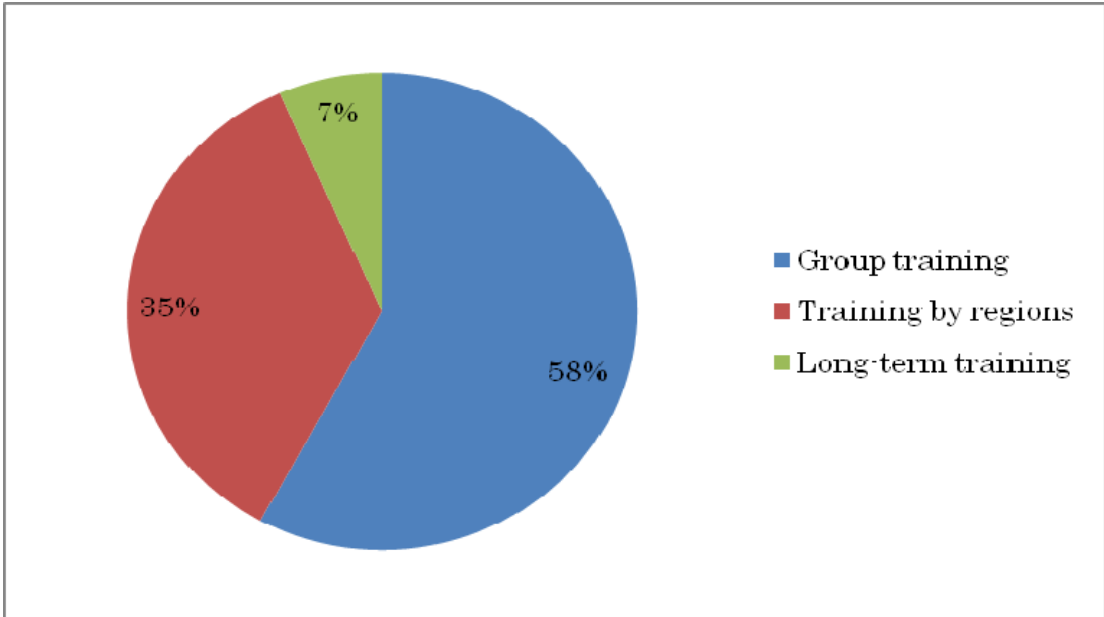
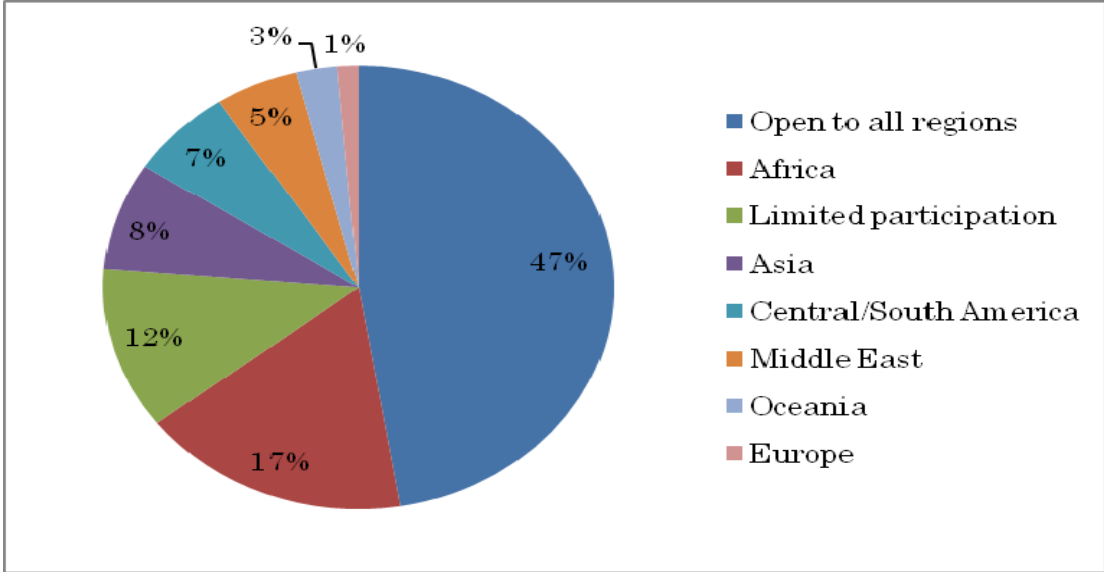


Figure 16 Regions of Training Participants



On the issue of organizations that are targeted for training, a large proportion of trainees (participants) come from ministries and/or organizations of the country’s health administration at central level (such as ministry of health), and/or local level (39% from central government, 16% from local government). A number of trainees also come from regional center hospitals and university/research institutions (Figure 17). Although the number is comparatively small, there are some courses that target NGO staff. Additionally, some courses promote participation of both government and NGO officials by inviting them as pairs.

With regard to occupational background of personnel (trainees/participants), government official make up the highest percentage of all trainees (36%), followed by medical doctor, nurse/midwife, laboratory technician (Figure 18). In all cases, the leading figures of the target organizations are invited for training in Japan with expectations that they demonstrate their competence, skills, etc. acquired after their return to their respective offices.

Figure 17 Organizations Targeted

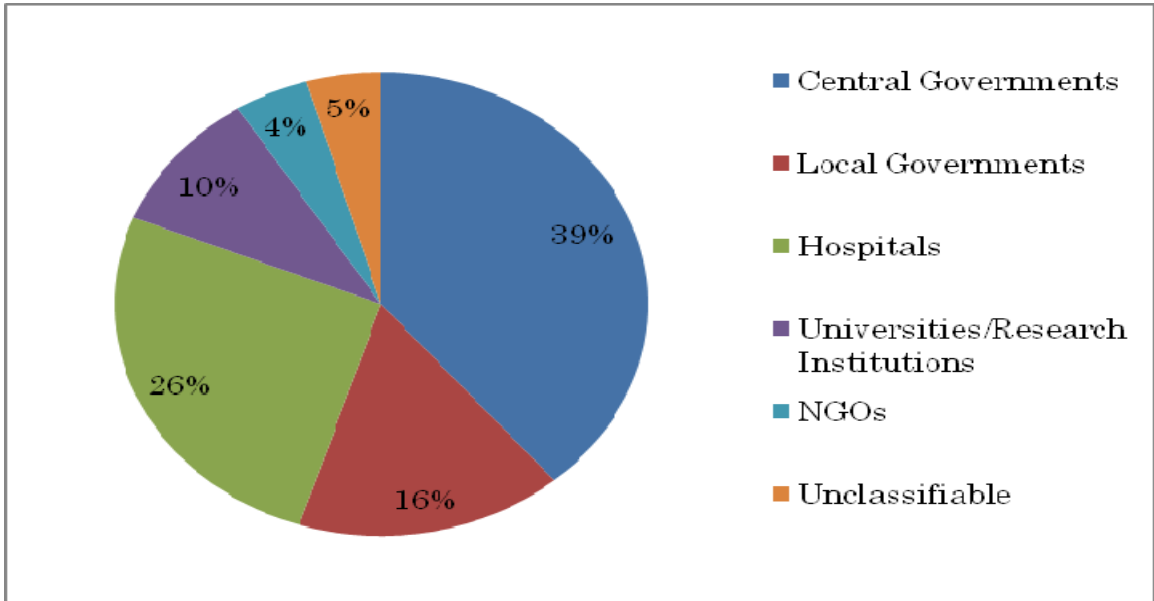
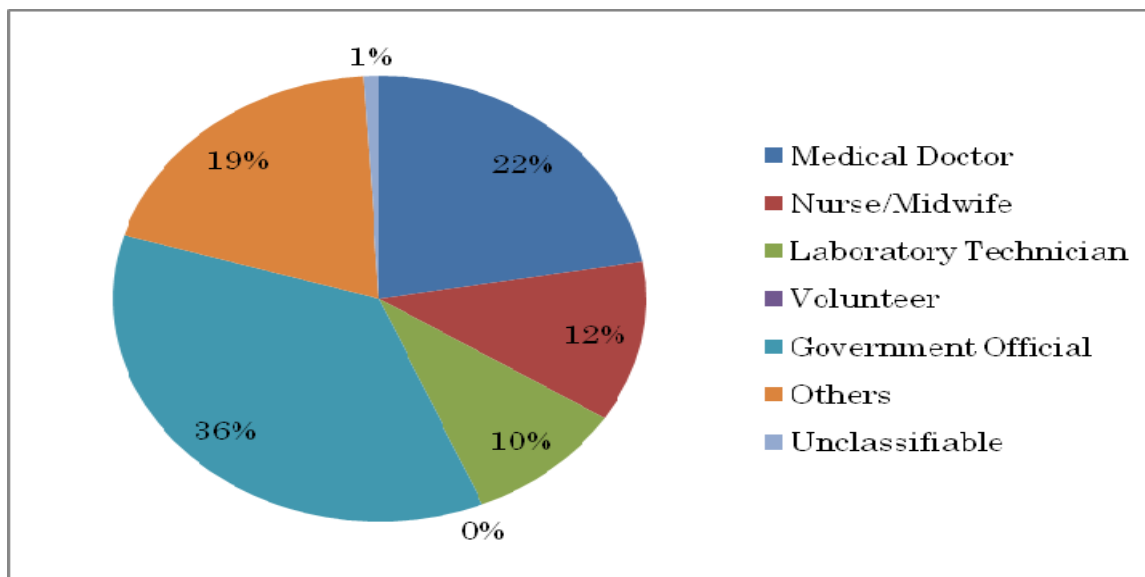




Figure 18 Professions Targeted



As regards the level (or contents) of training, high percentage of courses are on issues relating to policy and management. Many of them are intended to formulate health policies, strategies, and plans at central/local levels, improve performance of various health programs, and/or apply knowledge and skills to improve hospital management. Additionally, 12% of training courses are offered for trainers/teachers of universities and nursing schools (Figure 19).

Most of the training courses are conducted with relatively small number of participants of 10 persons or less. In particular, the number of participants for long-term training courses is small with 1 to 4 persons only (Figure 20).

Figure 19 Level (Contents) of Training

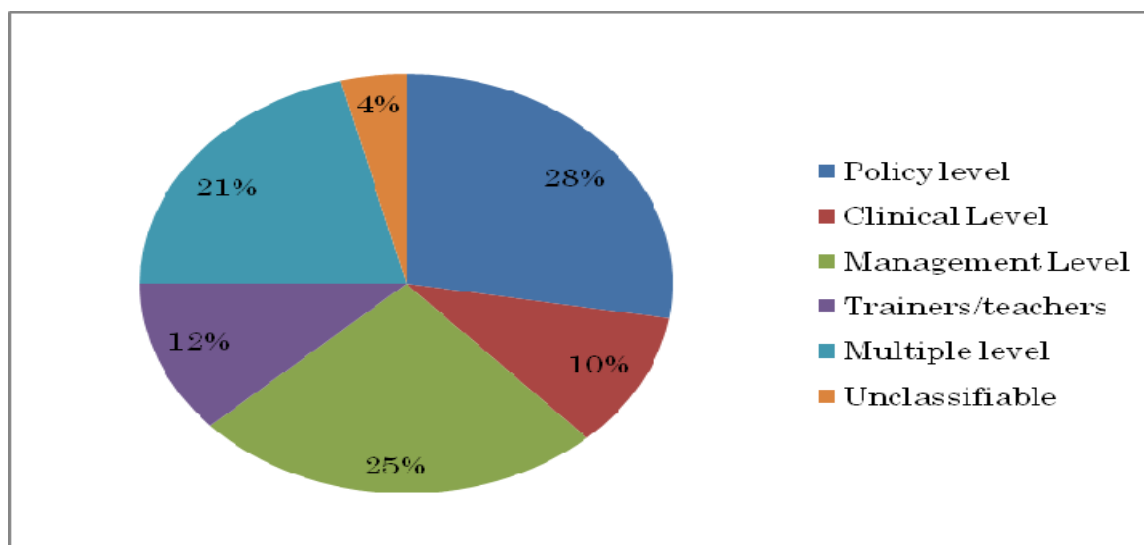
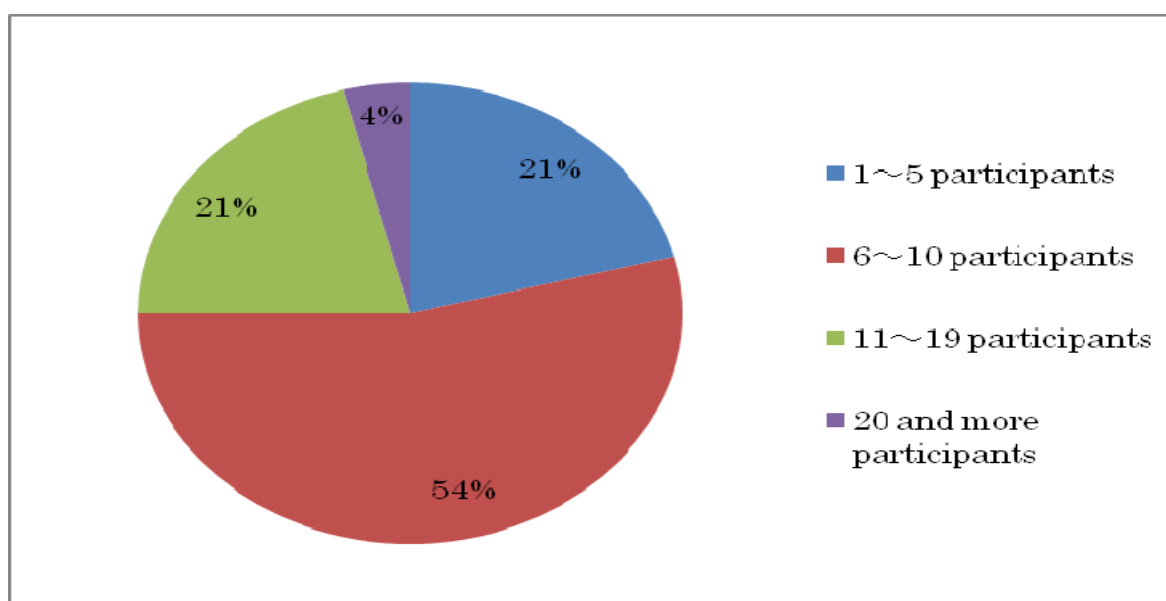


Figure 20 No. of Participants per Course



As regards the duration of training, most courses are conducted for less than 2 months (Figure 21). However, some training courses last for 1-2 years as in the case of long-term training which enables the participants to earn Master's degree in Public Health (MPH).

Availability of linkage with JICA's cooperation programs such as Technical Cooperation Projects was difficult to gauge from documentations available (i.e., training course outlines.) However, some stated that it was "desirable to coordinate (or have linkage) with

JICA’s programs,” and there were also cases of trainings conducted as part of JOCV’s Counterpart Training scheme. Additionally, there was a case of training done for students and lecturers of the Diploma course in dermatology that had been carried out as Third-country Training in Thailand. The training in Japan was to further upgrade their competence and skills in their respective fields as well as in teaching.

It should also be noted that most of JICA’s Technical Cooperation Projects have activities to carry out training for counterpart personnel in Japan.

Figure 21 Duration of Training

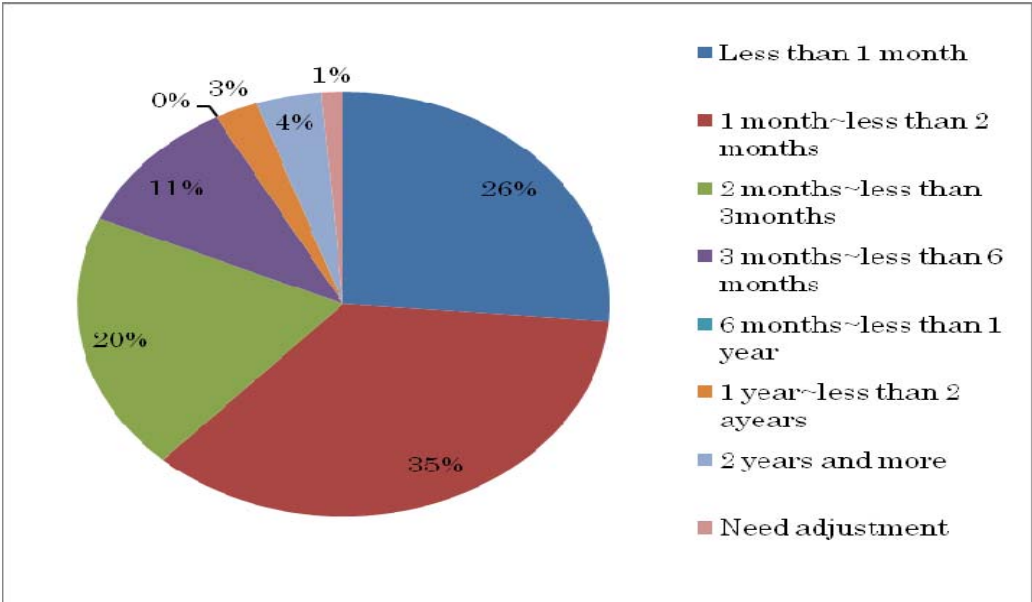
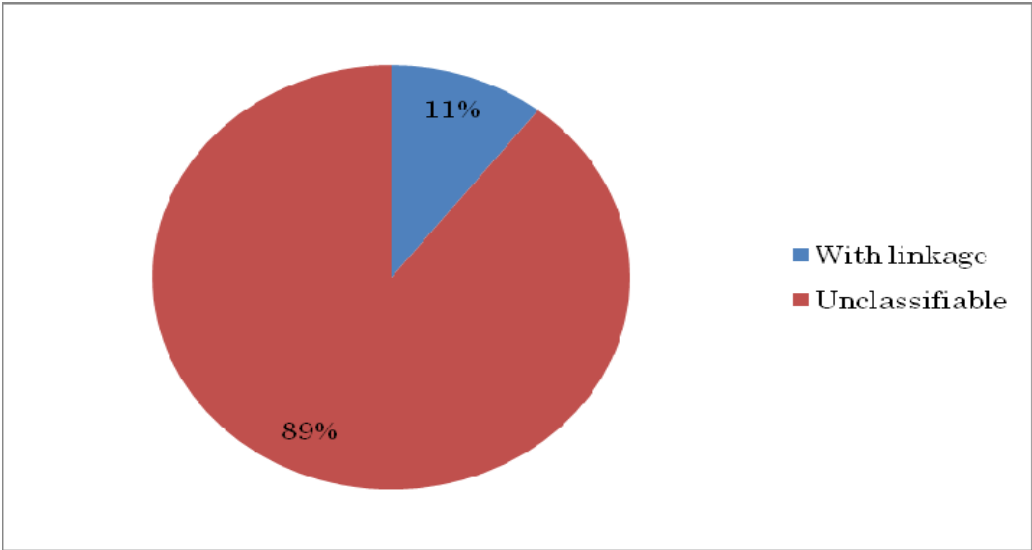


Figure 22 Linkage with JICA’s Program



For further information of JICA's activities and projects in the health sector, please visit our homepage:

[http://www.jica.go.jp/english/operations/thematic\\_issues/index.html](http://www.jica.go.jp/english/operations/thematic_issues/index.html)

**Japan International Cooperation Agency**

<http://www.jica.go.jp/>