DATA COLLECTION SURVEY ON HEALTH SECTOR IN KOSOVO AND ALBANIA

FINAL REPORT

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JAPAN INTERNATIONAL COOPERATION AGENCY

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SUMMARY

1. The Republic of Kosovo

1.1. Background and Outline of the Study

The Japanese government has supported for strengthening Kosovo's emergency medical services through human resource development by conducting trainings in Japan and providing ambulances through a grassroots' grant scheme for the purpose of improving the governmental administrative capacity, which is a priority area of assistance of the Japanese government for Kosovo. In addition, the introduction of "Japanese-Style" ODA assistance which has been currently promoted by Government of Japan (GOJ) in terms of health system is also expected to be addressed based on the strategy diplomacy in Japan. In order to develop more effective and efficient supports in the future, it will be useful for Japan to update the comprehensive and latest information of the health sector in Kosovo. The field survey was conducted from April 1st to 17th, 2014 at the capital Pristina, Mitrovice, Prizren, Peje (Gjakove) in Kosovo. In the field study, past achievements of projects in which Kosovo Ministry of Health was involved, the future needs and plans, and a support trend of international donor countries were also investigated, in addition to the basic information of the health sector of Kosovo. A Study Team had also exchanged opinions with stakeholders of the Ministry of Health about Japanese interest fields of assistance and its adaptation schemes.

1.2. Country overview and the Health Sector in Kosovo

Kosovo is a country of 10,887 sq. km area, and located almost at the center of the Balkan peninsula with 1.8 million inhabitants. Kosovo declared its independence from Serbia in February 2008, and has continued its stable economic growth since then. However, its gross national income (GNI) per capita is USD 3, 890 in 2013 (World Bank), meaning that it is one of the poorest countries in Balkan region.

In the "Program of the Government of Kosovo 2011-2014", four major development agendas are listed: (1. Sustained economic growth, 2. Improvement of governance and rule of law, 3. Human resources development, 4. Social welfare being currently underway. In the health sector, with the aim to provide high quality medical services to the general public by the health sector reform, the development of medical-related laws and regulations, and the policy with an emphasis on the improvement and expansion of health facilities from the primary to tertiary levels, have been promoted under "Health Sector Strategy 2010-2014".

Up to now, since the declaration of independence, although there is the momentum that many related laws and regulations are discussed and certified by the National Assembly in the health sector, the sufficient capital investments and development have not been done for securing of healthcare resources, securing and training of medical personnel, updating of medical equipment and medical infrastructure, and appropriate procurement and distribution of drugs. In order to solve these issues, Kosovo Ministry of Health has been promoting wide ranging health sector reform , by strengthening the governance, increasing financial resources by introducing the medical insurance system, strengthening of drug management system, and introducing medical information management system (HMIS), with supports of donor countries and organizations. In addition, the government has been promoting expansion of the function of University Clinical Center of Kosovo (hereinafter referred to as "UCCK") as a development project of secondary and tertiary medical care facilities.

Trends of donor assistance in the health sector is as follows; with regard to the development of the health insurance system and laws and health care regulations, which forms the basis of health sector reform in Kosovo, strengthening of governance and the legislation development have been implemented with the support of technical assistance by the Luxembourg government and a soft loan from the World Bank (Approximately USD 25 million, subject to authorization of the Kosovo Parliament and the World Bank, five-year planned from the end of 2014.).

For the development of secondary and tertiary medical care facilities and equipment, the maintenance of equipment associated with construction of a cardiac surgery still under negotiation in UCCK, and construction of the Emergency Medical Care Center and its equipment maintenance are to be supported by soft loans of the Austria government (4.6 one million euros) and the Islamic Development Bank (about 30 million).

1.3. Challenges and Suggestion for Project Formulation on the Health Sector in Kosovo

1.3.1 Challenges on the Health Sector in Kosovo

1) Changes in the Disease Structure

Disease of the circulatory system was almost two thirds of the cause of death in Kosovo. Lifestyle diseases, including cancer and stroke, and heart disease are on the rise nowadays. Furthermore, the external causes to a seventh leading cause of death of men include suicide and traffic accidents, and it has been increasing sharply 4 times from 2006 to 2011. Thus, it is required high medical care service for disease which can worsen rapidly, advanced medical technologies for early diagnosis and treatment, and introduction of campaign and public relations activities to disseminate preventive measures to encourage the transformation of diet and lifestyle.

2) Patient Concentralization at the Tertiary Health Care Facility (UCCK)

Patients tend to concentrate at UCCK, the only tertiary health care facility in the country. Such phenomenon occurs based on the patients' notion that more advanced facilities and equipment as well as higher competent doctors are available at UCCK. As a result, the patients believe that they will be able to receive higher level of treatment, and prefer to visit the tertiary health care facility from the first contact (without knowing the actual necessity of having advanced treatments). Challenges involved centralization of patients into tertiary health care facility is as follows:

i) Vulnerability of Function of Secondary Health Facilities

It is necessary to develop infrastructures and equipment of secondary health care facilities (10 regional hospitals) which are located throughout the country. Lifestyle-related diseases, such as tumor, cerebrovascular and heart disease, and severe trauma due to traffic accidents have been increasing recently and both require early diagnosis and treatment. Therefore, the development of medical facilities and equipment, strengthening of the transport system of patients, and capacity building of medical personnel who are working at the secondary health care facilities are all necessary for patients to receive proper treatments at the level of secondary health care facilities, without visiting a tertiary health care facility.

ii) Vulnerability of Function of Primary Health Facilities and Lack of Prevention Activities

In order to expand the activities to reduce the mortality and morbidity of the lifestyle-related diseases, such as a tumor or cardiovascular disease, which are accounts for significant mortality factors, the functions of Main Family Medicine Center (MFMC) and Family Health Centers (FMC) also need to be improved. Upgrading of existing aging equipment in primary health care facilities is required in combination with the introduction of campaigns and activities of public

relations to disseminate preventive measures to encourage the transformation of diet and lifestyle, and the capacity building of health care workers responsible for the public health of local residents.

The “Health Sector Strategy 2010-2014”, its aim is at upgrading nearly half of existing medical facilities within the year of 2014, but the progress of this attempt has been delayed. Majority of existing equipment of primary and secondary medical care facilities, which was introduced at the end of the conflict in early 2000, is aging and need to be updated now.

iii) Aging Medical Equipment and inadequate Medical Equipment for Advanced Medical Care in Tertiary Health Care Facilities

In the UCCK, responsible for tertiary health services, there are several developments which cannot provide required medical services due to the lack of adequate medical equipment, although health care workers with sufficient competency are working there. Particularly, at the pediatric surgery department, the orthopedic surgery department, gastroenterology department (endoscope), and the medical services department using diagnostic imaging tests, activities of equipment maintenance are insufficient. Therefore, although the number is slight low, some patients who are in need of further medical services have been transferred to private hospitals or neighboring countries, including Macedonia.

1.3.2 Suggestion for Future Assistances on Health Sector in Kosovo

1) Upgrading and Renewal of Medical Equipment

Although the developments of facility infrastructure for UCCK, , and for some regional hospitals, have been conducted as high-priority projects, equipment of the majority ofregional hospitals and MFMCs have remained intact.

According to the results of sampling survey of regional hospitals and MFMCs, and interviews with the Ministry of Health, it was identified that the highest priority is to upgrade existing aging equipment in the secondary health care facilities, followed by primary medical facilities. Although the priority would be lower than primary and secondary health care facilities, assistances for the equipment for certain special medical service department would still be required in UCCK, a tertiary health care facility. By such assistance, it would be expected to alleviate the patients’ concentration at UCCK, and with a synergy from the family doctor system to realize the balanced medical referral system from the primary to tertiary care facilities.

[Priority 1] Strengthening the function of secondary medical facilities (Regional Hospitals)

In order to correspond to the transformation of the disease structure in recent years, upgrading and renewal of medical equipment maintenance is required to enhance the function of regional

hospitals and reduce the number of deaths from diseases. Furthermore, by strengthening the function of the secondary medical facility, it would be expected to alleviating the symptoms of patients' concentrated in UCCK.

Target Regional Hospitals:

They are 10 government hospitals across the country, among which in the view of the scale of each medical facility and its services, high priority facilities from four regions on the top were selected as Table 1 shows. It should be noted, Mitrovice Regional Hospital was excluded due to the fact that it has just finished renovations in 2014. Thus, four regional hospitals are Gjilan, Gjakove, Peja and Prizren.

Table 1, Activities of Regional Hospital
(Statistics in 2010, Kosovo Bureau of Statistics data)

No	Region name / Facility name	# of bed	# of physician	# of nurse	# of inpatients	# of surgeries	# of delivery
1	Gjilan / Gjilan	414	241	158	16,754	2,077	2,121
2	Peja / Gjakove	417	155	211	17,192	2,797	2,202
3	Peja / Peja	422	201	236	16,147	3,547	2,433
4	Prizren / Prizren	521	240	342	25,668	5,287	4,295
5	Mitrovice / Vushtri	76	57	52	4,213	1,658	650
6	Gjilan / Ferzaj	65	114	99	3,380	101	1,701
7	Mitrovice / Mitrovice	12	119	83	688	147	1,227
8	Mitrovice / North Mitrovice	-	-	-	-	-	-
9	Mitrovice / North Mitrovice	-	-	-	-	-	-
10	Prishtina / Gracanice	-	-	-	-	-	-

Remarks: The candidates' facilities for equipment maintenance are shaded.

[Priority 2] Strengthening the Function of Primary Health Care Facilities (MFMC)

Due to aging electrocardiograph and general radiographic X-ray equipment, a downward trend has been observed in the utilization rate and the number of testing of these machines. For residents, chest examination by plain X-ray imaging and electrocardiogram examination by electrocardiograph are crucial at familiar primary health care facilities, thus as part of preventive care services it is expected that can lead to early detection and early treatment of diseases.

Target MFMCs:

Basically there is one MFMC per municipality (city / town). At present, there are 38 municipalities. The latest statistical data, however, was published in 2010 shows, however, that the number of municipality was 30 at that time. Thus the number of facilities was also 30. In the data, since the activity records of four facilities among them are not provided, 26 facilities are eventually counted as the target facilities.

[Priority 3] Strengthening Advanced Medical Services in UCCK

Since UCCK has accommodated certain number of competent health workers, the needs of

development of facility of a tertiary health care facility still exist. Especially assistances for the departments of pediatric surgery, orthopedic surgery, gastroenterological medicine (endoscope), and other specialized medical services such as imaging diagnostic would be required.

The group of the main equipment which was found to be in need of maintenance in this survey is shown in the table below.

Table 2, Necessary Medical Equipment

Department	Department	Main equipment
UCCK	Diagnostic imaging	MRI、CT、General X-ray and fluoroscopy, CR unit, etc.
	Pediatric surgery : Operation	Operation table, Operation light, Patient monitor, Anesthesia, etc.
	Pediatric surgery : ICU	Patient monitor, Ventilator, Electrocardiograph, Infusion pump, etc.
	Orthopedic and trauma : Operation	Operation table, Operation light, Patient monitor, Anesthesia, etc.
	Endoscopy center	Video gastroscope, Video colonoscope, Video bronchoscope, etc.
Regional Hospitals	Diagnostic imaging	MRI、CT、General X-ray and fluoroscopy, CR unit, etc.
	ICU	Patient monitor, Ventilator, Electrocardiograph, Infusion pump, etc.
	Operation	Operation table, Operation light, Patient monitor, Anesthesia, etc.
	Laboratory	Hematology analyzer, Biochemical analyzer, Electrolyte analyzer, etc.
	Blood Bank	Blood bank refrigerator and cool box
	Emergency	Patient monitor, Ventilator, Electrocardiograph, Infusion pump, etc.
	Endoscopy center	Video gastroscope, Video colonoscope, Video bronchoscope, etc.
Main Family Medicine Centre (MFMC)	Diagnostic imaging	General X-ray and fluoroscopy, CR unit, etc.
	Laboratory	Hematology analyzer, Biochemical analyzer, Electrolyte analyzer, etc.

	Endoscopy	Video gastroscope, Video colonoscope, etc.
	Emergency	Electrocardiograph, Patient monitor, etc.

Table 3, Estimated amounts of Equipment Costs

	Facility	Number of facility	Unit cost (JPY)	Total (JPY)
1	UCCK	1	709,100,000	709,100,000
2	Regional Hospital	4	572,000,000	2,388,000,000
3	MFMC	26	87,900,000	2,285,400,000
Grand Total				5,382,500,000

Note: The Contents of medical equipment at each facility of Regional Hospital and MFMC shall be same package.

2) Technical Assistance

i) Hospital Management

The director of department for European integration and policy coordination, Mr. Mentor SADIKU, has participated 5-S-KAIZEN-TQM training which was implemented by Japan International Cooperation Agency (JICA) and has intension to introduce its concept to health facilities in Kosovo. The Health Sector Strategy 2014-2020, which will be authenticated by parliament of Kosovo(not approved yet as of June 2014), indicates action plans to introduce appropriate and efficient management system for public hospitals. Regional hospitals need to change the current management structure, because they need to operate their facilities more efficiently, to disseminate information to residents from their facilities, and to introduce new management system to establish “Service Lines” in addition to the need of upgrading medical facilities’ infrastructures and equipment. The implementation of 5-S-KAIZEN-TQM can be a significant tool for improvement of hospital management.

ii) Maintenance of Medical Equipment

Each health facility is currently responsible for the maintenance of its medical equipment. The inventory, however, is not effectively updated and information gathering and management of the equipment have not well organized and adequate trouble shooting has not been implemented in current conditions. These issues shall be improved in utilizing available financial resource efficiently. It is considered highly effective to have capacity building opportunities for the medical engineers who are allocated (one to two personnel at each regional hospital) especially for the improvement of the skills on management of maintenance of medical equipment.

2. The Republic of Albania

2.1. Background and Outline of the Study

Under “the program for improving medical and educational services," which is the assistance priority areas in Albania, the Japanese government has been providing emergency medical equipment and implementing various training in the health sector by utilizing a grant aid scheme. In addition, the introduction of “Japanese-Style” ODA assistance which has been currently promoted by GOJ in terms of health system is also expected to be address based on the strategy diplomacy in Japan. In order to develop more effective and efficient supports in the future, it will be extremely useful for Japan to update the comprehensive and latest information of the health sector in Albania. A field study was carried out from March 17th to 31th, 2014 at the capital Tirana, Durres, Elbasan in Albania. In the field study, past achievements which Albania Ministry of Health was involved, the future needs and plans, and the support trend of international donor countries were also investigated, in addition to the basic information of the health sector in Albania. We had also exchanged opinions with the Ministry of Health stakeholders about the Japanese interest fields of assistance and its adaptation schemes.

2.2. Country overview and the Health Sector in Albania

Albania is a country located in the southwestern part of the Balkans, and has a surface area of approximately 28,748 square kilometers with 2.82 million inhabitants (2011 census). For many years, Albania, which has taken the socialist system with semi- seclusion practice, began to adapt the open doors policy, and it is promoting the transition to a market economy in stages since1990. However, with gross national income (GNI) per capita in 2013 was USD 4,700(World Bank), and the percentage of the population who live under less than USD 1 per day was 4.3% (2008, World Bank), Albania still has poverty problem.

"National Strategy for Development and Integration 2007-2013" which was adopted in March 2008, indicated medium-and long-term development goals, including the economic and social development and the EU accession strategy. It also defines the health sector goal as "to provide basic, efficient, and high quality medical services to everyone." The challenges facing today are; (1) to correspond to the disease structure change, (2) a complexity of medical security system. As specific strategies for these challenges, strategies of “improving abilities of operation management in order to make efficient use of the facilities” and “increasing opportunities to enjoy medical services" are mentioned.

NSDI 2014-2020 (draft), which was formulated in 2012, aims to achieve health coverage (UHC) as a

policy by 1) improving access to primary health services including preventive medical services, 2) improving quality of medical services by improving clinical and institutional operation management, and 3) redress regional health service disparities. In particular, strengthening of the medical referral system from primary to tertiary health facility by activating a family doctor system responsible for primary care services, promotion of packaged of medical services, ensuring the quality of service by introducing medical protocols for major diseases, etc. will be key approaches to target achievement.

In Albania, the main partners for health were the WB, USAID and WHO. A "Coordination Group Health" is led by USAID and WHO in alternation. In bilateral aid agencies, besides USAID as described above, Swiss Development Cooperation Corporation (SDC) is continuing to support historically in the health sector. In addition, JICA and Italian Development Cooperation Agency contributed especially in the strengthening of emergency medical system. UN-agencies like UNICEF, UNFPA and FAO are joining the group in a less regular manner.

For most actors involved in health, the common denominator of focus in their support is "inadequate health insurance coverage", "inequitable access to health services" and "lack of health literacy." As for the characteristics of donors' assistance to Albania in the health sector, the emphasis seems to have been placed on improving the quality and expanding access to health care services.

2.3. Challenges and Suggestion for Project Formulation on the Health Sector in Albania

2.3.1 Challenges on the Health Sector in Albania

1) Sign of Aging Population

The elderly population is increasing by extending life expectancy due to economic development and progress of medical technology in Albania. Although the elderly population of over the age of 65 is currently still below the younger population of under the age of 15, and there is uncertainty in demographic trend due to the birth rate trend and repatriation of emigrants, the difference between the two population groups is expected to be narrowed gradually and Albania would face problems of an aging society and the increase of burden of the health care cost for the elderly in the future.

2) Changes in the Disease Structure

According to hospital statistics, the prevalence of infections and parasitic diseases have been declining, but respiratory system disease, digestive system diseases, complication of pregnancy, and accident trauma have remained at the same level, and lifestyle-related diseases such as circulatory diseases, tumor, and neonatal disease are on the increase. Cause of death by trauma accident is on the rise, and those by tumors, neonatal disease and cardiovascular disease are unchanged. Appropriate early medical care, diagnosis, and treatment at the nearest locations would play important role for dealing with the coming

disease trends.

3) Bypass Phenomenon at Secondary Health Care Facilities

Albania has been facing a problem of “bypass phenomenon”, in which patients concentrate at tertiary health care facilities in the capital. The main reason is observed to be weakness of Regional Hospitals and District Hospitals as secondary health care service. The result of survey of regional hospitals in Vlore, Dibura, and Korce shows that relatively a lot of medical equipment is decrepit and major equipment necessary to provide medical service at secondary health facilities are lacking. Since those hospitals have a low bed occupancy rate, and an allocation of hospital income and a budget from Ministry of Health for secondary health facilities are inadequate, they are in a vicious circle in which they cannot allocate enough resources for infrastructures and the maintenance of medical equipment. Many patients are concentrated at a tertiary health facility as those secondary hospitals have low facility management capability and maintenance of hospitals is inadequate.

2.3.2 Suggestion for Future Assistances on Health Sector in Albania

Given the recent aging trend and needs for early diagnosis and treatment, the concentration of patients at a tertiary health care facility without utilizing secondary health facilities is one of the fundamental problems of the health sector in Albania. The Study result suggests that the main cause stems from the vulnerability of local medical service system. Therefore, it is recommended to strengthen regional hospitals. Ministry of Health officials generally confirmed above understanding and further provided a view that regional hospitals of Vlore (southwestern and coastal areas), Dibra (northeastern part), and Korce (southeastern), being located in geographically important regions of Albania, should be reinforced as a hub hospital in each region. Intraregional hospitals (including district hospitals), not only regional hospitals, should also be strengthened.

In order to revitalize local health service, strengthening the medical referral system and the facility management operation, such as cooperation between medical facilities are also important, in addition to development of medical facilities’ infrastructures. Moreover, in order to make effective use of upgraded medical equipment, the enhancement of the function of Biomedical Engineering Center, which is a responsible agency for the medical equipment maintenance at national level, should be promoted. By using a technical cooperation scheme, the needs of assistant for these areas are also high.

It should be noted that the necessity of taking countermeasures against lifestyle-related diseases and the importance of preventive measures have been also acknowledged in the NSDI 2007-2013 and in

the draft of NSDI 2014-2020. Furthermore, NSDI 2014-2020 pursues to improve public access to basic health services (including secondary health care) for the purpose of achieving the target of "Increasing access to effective health services". Therefore above-mentioned suggestions for project formulation on health sector meet the policy of the health sector in Albania. The details of assistance are shown in below.

1) Strengthening of Medical Equipment at Regional Health Care Facilities

Development of medical equipment is to be promoted on regional basis. The conditions of medical facilities of three candidate regions and the equipment's development plans are shown in the table below. It should be noted that this plan is based on the inference of the general conditions of regional hospitals obtained by the sample survey of Durres and Elbassan Regional Hospitals which was conducted in this Study. Therefore, it is necessary to confirm actual needs of medical facilities in the target areas by further investigation of the real conditions of those facilities and a disease situation in these area. At present, it is necessary to consider the possibility of converting district hospitals, which have been positioned under the umbrella of regional hospitals, into Day-Care Centers by downgrading their functions, then, investing into strengthening of the function of regional hospitals to use local medical resources effectively. In detail, there is a plan of converting a part of district hospitals in Korce and Vlore Districts into Day-Care Centers. In this case, their inpatient's functions and facilities are to be transferred to other district hospitals or regional hospitals

2) Technical Field

i) Strengthening of Medical Referral System

In order to function the medical resource reallocation within regions, reinforcing coordination mechanism between facilities in different referral levels. According to NSDI 2014-2020, achieving "1) Increase access to effective health services" needs proper function of referral system from primary to tertiary level by utilizing the family doctor as a foundation of primary health service. This strategy aims at improvement of the management capacity and quality of services, for which needs for the technical knowledge would be high. Especially, it is important to give extra consideration to avoid the consequences that the access to health services for local people ends up with being exacerbated as a result of streamlining the function of district hospitals.

ii) Strengthening of National Biomedical Engineering Center

Currently, maintenance of medical equipment is carried out by each medical facility. However, since the inventory of the medical device has not been updated for long time nor various

guidelines and a maintenance plans based on the actual condition are not formulated. According to the explanation from the Ministry of Health, currently, Albania is considering the formulation of such guidelines, including the maintenance and development of laws that take into consideration the EU standards. Therefore, the needs of technical guidance for the Biomedical Engineering Center, which undertakes the medical equipment management at national level, would be high in order to strengthen the maintenance system of medical facilities.

iii) Hospital Management

For effective assistance and effective usage of medical infrastructure and equipment, the capacity of hospital management should be strengthened. In detail, it is expected to seek the improvement in the areas of health system management and health workforce through technical assistances, such as training courses of health system strengthening and 5S-KAIZEN-TQM. Importance of these fields has been consistently recognized since the time of NSDI 2007-2013, and the draft of NSDI 2014-2020 aims at improvement of the clinical management and the general work operations in health care facilities in order to achieve "the improvement of management capacity of service and facilities and service quality." Therefore, supports for capacity building of hospital management would be important.

Table 4, Medical Facilities of Three Regions Nominated for Equipment Upgrade

	Region/ Facility	Number of bed	Number of patients	Bed occupancy rate	Number of operation	Level of facility in plan
1	Dibra (3 districts)					
	Regional Hospital	295	6,895	43.4	533	Regional Hospital
	District Hospital (Bulqize)	65	1,347	40.8	-	District Hospital
	District Hospital (Mat)	148	3,039	36.4	523	District Hospital
2	Korce (4 districts)					
	Regional Hospital	463	11,207	40.2	1,487	Regional Hospital
	District Hospital (Devoll)	41	1,002	32.7	-	Day-care Center
	District Hospital (Kolonje)	83	650	11.5	95	District Hospital
	District Hospital (Pogradec)	165	3,630	21.2	653	District Hospital
3	Vlore (3 districts)					
	Regional Hospital	591	15,847	55.5	2,107	Regional Hospital
	District Hospital (Delvine)	30	148	9.4	-	Day-care Center
	District Hospital (Sarande)	85	3,458	48.8	477	District Hospital

Source: Ministry of Health of Albania (the numbers of patients and beds are based on statistics of 2012)

1) Equipment contents of Regional Hospitals (Dibura Region and Korce Region)

	Department · Equipment	Q'ty	Japanese products*		Department · Equipment	Q'ty	Japanese products*
	Radiology				Laboratory		
1	MRI	1	○	1	Hematology analyzer	1	○
2	CT	1	○	2	Biochemical analyzer	1	
3	General X-ray	1	○	3	Electrolyte analyzer	1	
4	Fluoroscopy	1	○	4	Immunology analyzer	1	
5	CR unit	1	○	5	Hormone analyzer	1	
6	Ultrasonic diagnostic apparatus（obstetric）	1	○	6	Blood bank refrigerator	1	○
7	Ultrasonic diagnostic apparatus (cardiac)	1	○	7	Plasma freezer	1	○
	Endoscopy				Operation		
1	Video gastroscope	2	○	1	Operation light	3	○
2	Video colonoscope	2	○	2	Operation table	3	○
3	Video bronchoscope	1	○	3	Electrosurgical unit	3	○
	ICU			4	Patient monitor	3	○
1	Ventilator	5		5	Anesthesia	3	
2	Patient monitor	5	○		Emergency		

3	ICU bed	5	○	1	ECG	1	○
	Dental			2	Patient monitor	5	○
1	Dental unit and chair	1	○	3	Suction unit	5	
2	Autoclave	1		4	Ventilator	5	
3	Dental instruments	1		5	ICU bed	5	○
				6	Infusion pump	5	○
				7	Syringe pump	5	○

Remark: Assumed to be made by Japanese Manufacture

(2) Equipment contents of Regional Hospital (Vlore Region)

	Department · Equipment	Q'ty	Japanese products*		Department · Equipment	Q'ty	Japanese products*
	Radiology				Laboratory		
1	General X-ray	1	○	1	Hematology analyzer	1	○
2	Fluoroscopy	1	○	2	Biochemical analyzer	1	
3	CR unit	1	○	3	Electrolyte analyzer	1	
4	Picture archiving and communication system	1		4	Immunology analyzer	1	
5	Ultrasonic diagnostic apparatus（cardiac）	1	○	5	Hormone analyzer	1	
	Endoscopy			6	Blood bank refrigerator*	1	○
1	Video gastroscope	2	○	7	Plasma freezer*	1	○
2	Video colonoscope	2	○		Emergency		
3	Video bronchoscope	1	○	1	ECG	1	○
	Dental			2	Patient monitor	5	○
1	Dental unit and chair	1	○	3	Ventilator	5	
2	Autoclave	1		4	ICU bed	5	○
3	Dental instruments	1		5	Infusion pump	5	○
				6	Syringe pump	5	○

Remark: Assumed to be made by Japanese Manufacture

3) Equipment contents of District Hospital (per facility)

	Department · Equipment	Q'ty	Japanese products*		Department · Equipment	Q'ty	Japanese products*
	Radiology				Laboratory		
1	General X-ray	1	○	1	Hematology analyzer	1	○
2	Fluoroscopy	1	○	2	Biochemical analyzer	1	
3	CR unit	1	○	3	Electrolyte analyzer	1	
4	Ultrasonic diagnostic apparatus（obstetric）	1	○	4	Centrifuge	1	○
	Endoscopy				Operation		
1	Video gastroscope	1	○	1	Operation light	3	○
2	Video colonoscope	1	○	2	Operation table	3	○
3	Endoscope storage locker	1	○	3	Electrosurgical unit	3	○
	ICU			4	Patient monitor	3	○
1	Ventilator	5		5	Anesthesia	3	
2	Patient monitor	5	○				
3	ICU bed	5	○				
	Emergency				Dental		
1	ECG	1	○	1	Dental unit and chair	1	○
2	Patient monitor	1	○	2	Autoclave	1	

Remark: Assumed to be made by Japanese Manufacture

4) Equipment contents of Day-care center (per facility)

	Department · Equipment	Q'ty	Japanese products		Department · Equipment	Q'ty	Japanese products
	Radiology				Laboratory		
1	General X-ray	1	○	1	Hematology analyzer	1	○
2	Fluoroscopy	1	○	2	Biochemical analyzer	1	
3	CR unit	1	○	3	Electrolyte analyzer	1	
4	Ultrasonic diagnostic apparatus（obstetric）	1	○	4	Centrifuge	1	○
	Endoscopy				Operation (Minor)		
1	Video gastroscope	1	○	1	Suction unit	1	
2	Video colonoscope	1	○	2	Treatment table	1	○
3	Endoscope storage locker	1	○		Dental		
	Emergency			1	Dental unit and chair	1	○
1	Operation Light	2	○	2	Autoclave	1	
2	ECG	2	○				
3	Patient monitor	2	○				

Remark: Assumed to be made by Japanese Manufacture

5) Estimated amount of equipment costs in each region, Dibura, Korce, and Vlore (Unit: Yen)

Name of Region and Facility	Quantity	Per facility		Areas total
		Subtotal	Total	
(1) Dibura Region				
Regional Hospital	1	572,000,000	572,000,000	
District Hospital	2	200,050,000	400,100,000	
Day-care center	-	-	^	972,100,000
(2) Korce Region				
Regional Hospital	1	572,000,000	572,000,000	
District Hospital	2	200,050,000	400,100,000	
Day-care center	1	106,750,000	106,750,000	1,078,850,000
(3) Vlore Region				
Regional Hospital	1	222,850,000	222,850,000	
District Hospital	1	200,050,000	200,050,000	
Day-care center	1	106,750,000	106,750,000	529,650,000
			Total	2,580,600,000

Contents

Appendix

Map of the Republic of Kosovo

Map of the Republic of Albania

Photograph（Kosovo）

	
1. Mitrovica MFHC	2. Mitrovica MFHC Dentistry An old dental unit
	
3. Gjakova MFHC The facility is too small for MFHC	4. GjakovaMFHC An examination room
	
5. Mitrovica Regional Hospital	6. Mitrovica Regional Hospital ICU New medical equipment

	
7. Gjakova Regional Hospital	8. Gjakova Regional Hospital laboratory An old blood analyzer
	
9. Gjakova Regional Hospital A radiographic X-ray equipment which is aged and out of order	10. Prizren Regional Hospital An emergency patient observation room
	
11. Prizren Regional Hospital An old CT	12. Prizren Regional Hospital An old ICU monitor

	
13. University Clinical Center Kosovo (UCCK)	14. UCCK UCCK has a large number of facilities
	
15. UCCK ICU with full of medical equipment	16. UCCK An emergency operating room
	
17. UCCK Facilities under renovation	18. UCCK A workshop of medical equipment

Photograph (Albania)

1. Tirana Policlinic No.3

2. Durras Regional Hospital
An pediatric ward of under renovation

3. Durras Regional Hospital
An old ultrasonic diagnostic apparatus

4. Elbasan Regional Hospital
Main Department, Internal Medicine Building

5. Elbasan Regional Hospital
Hospital room in Internal Medicine Building

6. Elbasan Regional Hospital
Laboratory and emergency wards

	
7. Vlore Regional Hospital	8. Vlore Regional Hospital Newly introduced ultrasonic diagnostic apparatus
	
9. Vlore Regional Hospital An old blood analyzer	10. Mother Teresa University Hospital Center
	
11. Mother Teresa University Hospital Center A new CT of an emergency building which is newly established	12. National Biomedical Center An observation of medical equipment database system

Tables

Figures

Abbreviation

Abbreviation	Kosovo
AIDS	Acquired Immune Deficiency Syndrome
CT	Computed Tomography
DoA	Dead on Arrival
ECG	Electrocardiogram
ENT	Ear Nose Throat
EPI	Expanded program of immunization
EU	European Union
FMC	Family Medicine Center
GDP	Gross Development Product
GNI	Gross National Income
GOJ	Government of Japan
GP	General Practitioner
HDI	Human Development Index
HIS	Health Information System
HIV	Human Immunodeficiency Virus
HMIS	Health Management Information System
ICU	Intensive Care Unit
MFMC	Main Family Medicine Center
MMR	Maternal Mortality Rate
MoF	Ministry of Economics and Finance
MoH	Ministry of Health
MRI	Magnetic Resonance Imagining System
NICU	Neonatal Intensive Care Unit
NIPHK	National Institute of Public Health Kosovo
ODA	Office Development Assistance
OPD	Out-Patient Department
PHC	Primary Health Center
SDC	Swiss Development Cooperation
SIDA	Swedish International Development Agency
STD	Sexually Transmitted Diseases
TB	Tuberculosis
U5MR	Under 5 Mortality Rate

UCCK	University Clinical Center Kosovo
UNDP	United Nation’s Development Programme
UNICEF	United Nations Children's Fund
UNMIK	United Nations Interim Administration Mission
UNSC	UN Security Council
USG	Ultrasonography
WB	World Bank
WHO	World Health Organization
WWC	Women Wellness Center
	Albania
ADHS	Albania Demographic Health Survey
CE	Clinical Engineers
COPD	Chronic obstructive pulmonary disease
EEHR	Enabling Equitable Health Reform
FAO	Food and Agriculture Organization
GFATM	Global Fund to Fight AIDS, Tuberculosis and Malaria
ICD	International Classification of Diseases
JICA	Japan International Cooperation Agency
NATO	North Atlantic Treaty Organization
NCCE	National Center for Continuing Education
NCD	Non Communicable Diseases
NSDI	National Strategy for Development and Integration
NSDI	National Strategy for Development and Integration
UHC	Universal Health Coverage
UNFPA	United Nations Population Fund
USAID	United States Agency for International Development
WTO	World Trade Organization

Chapter 1

Chapter 1 Purpose and Background of the Survey in Kosovo and Albania

1.1 Purpose of the Survey

The purpose of this Survey is to assess prioritized areas in the health sector in Kosovo and Albania for future Japanese assistance, taking into consideration possible projects, utilizing the advanced technologies and know-how of Japan in the health sector through data collection and its analysis.
The information related to Current situation and challenges of the health sector in both countries were collected and analyzed based on both countries' health policy documents, donor publications' reviews, and interviews with recipient governments, staff of health care facilities and donors during the field survey. The field survey was conducted from April 1st to 17th 2014 at the capital Pristina, Mitrovice, Prizren, Peje (Gjakove) in Kosovo, and March 17th to 31st 2014 at the capital Tirana, Durres, Elbasan in Albania.

1.2 Background of the Survey

Kosovo declared its independence from Serbia on February, 2008 and has been enjoying sustainable economic development. It however, is still one of the poorest countries in Balkan region as its GNI (Gross National Income per capita) 3,640 USD (2012, World Bank).
In "Health Sector Strategy 2010-2014," it is aimed to meet the EU criteria by strengthening the functions of secondary and tertiary health care facilities to provide health service appropriately.

Although Albania had adapted an isolationist policy for a long period of time, the seclusion policy was ended by the democratic movements during the 1990s and Albania became democratized by introducing a market economy for instance. However, the poverty still remains in the country as its GNI is 4,090 USD (2012, World Bank) and people living on less 1 dollar a day is 4.3% (2008 World Bank). In "National Strategy for Development Integration (2007-2013)", which was adopted on March, the current issues in health sector have been presented as; 1) Deal with new epidemiological profile of the population, and 2) Fragmentation of the health insurance system.

Japan has been providing assistance for emergency medical equipment and conducting trainings in health sector with a special focus on the improvement of administration capacity building program through the reinforcement of administration capacity and its human development in Kosovo, and the improvement of service in health and education in Albania. In order to consider the direction of future cooperation, however, comprehensive and the latest information is not gathered enough for the current situation of the health sector of both countries. Thus for this purpose, it was decided to collect the basic information on the health sector by carrying out this Study.

Chapter 2

Chapter 2 Overview of the Health Sector of Kosovo

2.1 General Overview of Kosovo Health Sector

2.1.1 Health Sector Overview

(1) General Overview

Kosovo is a state in the Balkan Peninsula of South Eastern Europe. Its largest city and capital is Pristina. Kosovo is landlocked and is bordered by the Republic of Macedonia to the south, Albania to the west and Montenegro to the northwest; to the north and east, it borders the central part of Serbia, whose government claims the territory of Kosovo as its Autonomous Province of Kosovo and Metohija. Kosovo has an area of 10,908 square km. Its population is almost 1.81 million (Statistical Office in Kosovo, 2012). Kosovo consists of 7 regions[1]. From 5 regions the United Nations through United Nations Interim Administration Mission (UNMIK) began overseeing the administration of the province after a UN Security Council (UNSC) resolution in 1999. Until 2007, Kosovo was divided into 30 municipalities. It is currently divided into 38 according to Kosovo law.

39.1% of Kosovo is forested, about 52% is classified as agricultural land, 31% of which is covered by pastures and 69% is arable. Its climate is continental, with warm summers and cold and snowy winters. Maximum temperature in summer is more than 30 ℃, but the lowest temperature in winter is -10 ℃.

The capital city is Pristina, and the main ethnic group is Albanian (92%), then Serbian account for 5%. The languages spoken are Albanian and Serbian. The population is nominally of two main religions- Muslim (Albanian) and Serbian Orthodox (Serbian). Kosovo declared independence from Serbia on 17th February after a long dispute in the 1990s. As of May 2014, 108 UN states recognize the independence of Kosovo and it became a member country of the IMF in 2009 and World Bank as the Republic of Kosovo. Kosovo has very low levels of GDP per capita compared with EU countries. Major economic indicators of Kosovo are in Table 1.

[1] Even though it is mentioned that there are seven districts in general, the number has not officially approved by the National Statistical Office. Originally, 5 region (Pristina, Mitrovice, Prizren, Gjilan, Peje) became 6 (5 + Ferzaj), and then it becomes 7 (6 + Gjacoba) now, but the inclusion of Gjacoba region has not been determined formally in court yet.

Table 1　Major Economic Indicators of Kosovo

Major Economic Indicators	Year	Indicators and Numbers
Main Industry	2009	Mineral mining, Construction materials, Base metal, Leather [GDP component ratio: Service (64.5%) , Industry (22.6%) , Agriculture (12.9%)][(1)]
GDP	2012	USD 6.445 Billion [(2)]
GNI per Capita	2012	USD 3,890[(3)]
Economic Growth	2012	2.7%[(4)]
Inflation Rate	2013	1.8% [(5)]
Unemployment Rate	2012	35.1% [(6)]
Major Trade Items	2011	Export Markets: Base metal, Mineral Products, Electric Machine and Appliance [(7)]
		Import: Mineral Products, Supplement and Food・Drink products・Tobacco, Machine and Appliance [(8)]
Major Trading Partners	2012	Export: Markets: Italy, Albania , Macedonia [(9)]
		Import: Macedonia, Germany, Serbia [(10)]
Currency	―	EURO (from 1999)

Source: 1: CIA World Factbook, 2: World Bank, 3: World Bank, 4: World Bank, 5: World Bank, 6: Statistical Office in Kosovo, 7: Statistical Office in Kosovo, 8: Statistical Office in Kosovo, 9: Statistical Office in Kosovo, 10: Statistical Office in Kosovo

(2) Health Sector Overview

"Program of the Government of Kosovo 2011-2014," which was formulated by the Prime Minister's Office to develop as the most supreme development plan of Kosovo, defines four main pillar issues as follows; 1) Sustainable economic development, 2) Good governance and strengthening the Rule of Law, 3) Human capital development, and 4) Social welfare, and currently, the government's efforts to solve these challenges are underway.

In addition, in "Health Sector Strategic Plan 2014-2020," it has been planned to review the conventional "facility units management style" and introduce the "medical service unit management style." For example, regarding the pediatric department of University Clinical Center of Kosovo's capital (hereinafter, UCCK) as a head hospital, and all pediatric departments of regional hospitals as affiliated hospitals, the same quality of health services is to be available in any regional hospital in the projected new system.

At the moment, patients tend to prefer to visit the tertiary medical institution from the beginning, since maintenance of equipment and facilities are more advanced as well as doctors with higher capacity in there (UCCK), thus people believe that they will be able to receive more advanced treatment. Therefore, patients tend to concentrate at UCCK and primary and secondary health care facilities have not been fully playing their original roles.

The Accession to EU is Kosovo's national target, so under the "Health Sector Strategy 2010-2014," Kosovo aims at promoting to meet the EU criteria in health sectors by improve the

function of health service provision of secondary and tertiary health care facilities. In particular, the introduction of the policy that prioritizes medical equipment with a CE mark which EU member countries are adapting or equivalent to international standards has been attempted in the process of equipment upgrading.

2.1.2 Major Indicators

(1) Population, Disease and Death

1) Population of Kosovo

The estimated population of Kosovo is about 1.85 million according to the Central Intelligence Agency in 2013 as shown in Table 2. Male is 957,782 and female is 901,421 in total. The median age is 27.8. In the total population, the proportion of 0-14 year-old is approximately 26.28%, and 65 years of age or older is 6.94%, so it has not yet exhibited the structure of a low birthrate and an aging population. Since the percentage of population over 65 years old is nearly 7.0% which is the aim of the aging society, it is necessary to take measures of the aging society. 36.8 % of the population is concentrated in urban areas while 63.2% of the population resides in rural areas according to Demographic Social and Reproductive Health Survey in Kosovo, 2009.

Table 2 Population of Each Age Group

Age	0～14	15～24	25～54	55～64	More than 65	Total
Percentage (%)	26.28	18.08	41.54	7.15	6.95	100
Amount (Total)	488,686	336,193	772,376	133,005	128,043	1,859,203
Male	253,876	176,738	407,347	65,762	54,059	957,782
Female	234,810	159,455	365,029	67,243	74,884	901,421
M：F Ratio	1.08	1.11	1.12	0.98	0.72	-

Source: https://www.cia.gov/library/publications/the-world-factbook/geos/kv.html

2) Population of Each Region

Population of seven regions is shown in Table 3. Seven regions are divided into 38 Municipalities. [2]Prishtina has the largest population, second largest municipality is Prizren, and then Ferzaj is third in Kosovo.

[2] There are three facilities of public hospitals in areas with many Serbs residents, but there are cases those are not described in such statistical data which have been officially published so far.

Table 3 Population of Each Region and Municipality

Region	Land Area.(Km2)	Municipality	Population (each municipality)	Total Population Percentage (each region)
1. Mitrovice	2,052	Mitrovice	72,623	234,435
		Leposaviq	13,712	13.0%
		Skenderaj	51,255	
		Vushtri	70,495	
		Zubin Potok	6,599	
		Zvecan	7,443	
		Veriole	12,326	
2. Prishtina	2,288	Prishtine	201,804	487,155
		Gllogoc	59,160	27.1%
		Fushe Kosove	35,733	
		Lipjan	58,292	
		Novoberde	6,796	
		Obiliq	21,769	
		Podujeve	88,877	
		Gracanice	10,871	
		Ranillug	3,853	
3. Peje	1,364	Peje	97,360	176,134
		Istog	39,727	9.8%
		Kline	39,047	
	1,224	Gjakove	95,363	198,838
		Decan	40,392	11.1%
		Rahovec	56,932	
		Junik	6,151	
4. Prizren	1,738	Prizren	179,869	335,780
		Dragash	34,308	18.7%
		Suhareke	60,549	
		Malishve	55,470	
		Mamushe	5,584	
5. Gjilan	1,220	Gjilan	90,863	178,621
		Kamenice	35,981	9.9%
		Viti	47,408	
		Kllokot	2,585	
		Partesh	1,784	
	1,020	**Ferzaj**	109,899	187,664
		Shtime	27,645	10.4%
		Kacanik	33,664	
		Shterpce	6,942	
		Hani Elezit	9,514	
Total	10,908			1,798,645

Source: Statistical Office of Kosovo, 2012

(2) Health-related Indicators of Kosovo

The main health indicators are shown in Table 4. A comparison of health indicators with EU countries are shown in Table 5.

Table 4 Main Indicators of Kosovo

No	Main Indicator	Kosovo	
1	Total Population in Kosovo	1,798,645(1)	2011
2	Population: The percentage of 0-14 years old (%)	26.28% (2)	2012
3	Life expectancy (years old)	70.00(3)	2011
4	Under-5 mortality rate (U5MR) (per 1,000 live births)	69.00(4)	2005
5	Infant mortality rate (IMR) (per 1,000 live births)	24.70(1)	2012
6	Maternal mortality rate (MMR) (per 100,000 live births)	35.00-49.00(4)	2013
7	Total expenditure on health as % of GDP	2.10 (5)	2009
8	General governmental expenditure on health as % of total government expenditure	7.60 (5)	2009
9	Rankin fog HDI (among 186 countries)	0.76 / 100 3(6)	2011
10	GNI per capita (USD)	3,890 (7)	2010
11	Adult literacy (%, over 10 years old)	96.15 (8)	2011

Source:
1: Kosovo Agency Statistics, 2012, 2: Central Intelligence Agency, 2013 3: Kosovo Human Development Report, 2012, 4: UNICEF in Kosovo, 2005, 5: Ministry of Health, Kosovo 2010, 6: Kosovo Human Development Report 2012, UNDP, 7: Ministry of Foreign Affairs in Japan, 8: Kosovo Population and Housing Census 2011

According to the World Bank statistics in 2012, the average of Under-five mortality rate is 6.4 and the average of infant mortality is 5.8 in Balkan countries (Bosnia and Herzegovina, Greece, Macedonia, Montenegro and Serbia). Under-five mortality rate and infant mortality rate in Kosovo are higher than those of other countries. The possible reason for this phenomenon seemed to be stemmed from the social factors, such as poor sanitation condition, malnutrition, poverty, and the lack of health education, which can cause respiratory infections, acute infectious diarrhea, congenital diseases, congenital malformations, and delayed response to those diseases.[4]

According to JICA report (2010)[5], Kosovo's poor health indicators compared to other EU countries are resulting from high poverty rate (about 45% as of 2005/6) with the background of high unemployment rate which is said to be around 40% in 2009. In addition to that, poor health indicators (i.e. high infant mortality rate,) in poor areas such as in southeast region also further contribute to poor health outcomes of the whole country.

According to UNICEF[6], especially for women of the minority groups like Roma, Ashkali, Egyptian, an access to good quality maternal services is limited. Utilization of contraceptives is also low, and the ratio of determination to use maternal medical examination by a person other than a pregnant woman herself is as high as 15-45%. Thus, the high maternal mortality rate in

[3] Human Development Index is calculated between 0.00-1.00.
[4] http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3633379/
[5] JICA, 2010, Final report on poverty profile study in Kosovo
[6] UNICEF HP "UNICEF Kosovo"
(http://www.ks.undp.org/content/kosovo/en/home/mdgoverview/overview/mdg4/) (Accessed May2014)

Kosovo stems not only from the poor status of establishment of health services, but also from lower status of women in Kosovo than in other EU countries.

The above-described utilization of contraceptives is as low as 8%. The report of the JICA in (p.12), illiteracy rate of women of Kosovo is high as 12%, and pointed out that 26 % of women 16 to 19 years old are illiterate in rural areas. In addition, the labor force participation rate of women is only 35%, which is the lowest level in Europe.

(3) Disease Structure of Kosovo

According to Health Sector Strategy 2010-2014, the three most common recorded disease groups in PHC are the musculoskeletal system and connective tissue diseases (36.2%), the group of respiratory system diseases (21.6%), and the group of cutaneous and subcutaneous tissue diseases (8.5%). In second level hospitals, the three common diseases recorded in the regional hospitals in Kosovo in 2006 were the respiratory system disease (15.2%), pregnancy, labor and postpartum period after childbirth (11%) and the blood circulation system diseases (10.3%). In the tertiary level of hospital, the three most common groups of diseases recorded in UCCK in 2006 were: respiratory system diseases (12.9%), pregnancy, labor and postpartum period after childbirth (11.7%) then the blood circulation system diseases and infectious parasite diseases (9.4%).

The ranking by first 10 groups of causes of deaths in Kosovo for each gender in 2006 is shown in Table 6. Disease of the circulatory system was almost two third of the cause of death in Kosovo. Adult diseases including cancer and stroke, and heart disease account for the majority. Cardiovascular disease accounts for about two-thirds in both men and women, and then followed by tumor and congenital diseases. According to Analysis of the Health Status of the Population 2012, prevalence rate of cardiovascular disease was 137.1 (per 100,000 population) in 2006, but is on the rise and 187.5 (per 100,000 population) in 2011. Men and people of 65 years old or older are more likely to have the disease. As for cardiovascular disease, including ischemic heart disease and the like, since the symptoms can worsen rapidly in many cases, introducing advanced medical technologies for early diagnosis and treatment and development of a medical system for the event of an emergency are required, as well as preventing the disease from the beginning,

Certain conditions originating in the perinatal period are the third most common diseases resulting in death in 2009. This mortality rate was reduced to sixth leading cause of death is in 2011. The reason was not mentioned in the report of Analysis of the Health Status of the Population 2012. It is assumed that this result was caused because the Ministry of Health had taken initiatives on reduction of infant mortality as a priority issue, and international aid agencies implemented many effective trainings and projects in the field of reproductive health such as the joint project “Improving Health of Maternal and Child Health of Kosovo” supported by UNICEF, WHO and UNFPA.

Also external causes to a seventh leading cause of death of men include suicide and traffic accidents, and has been increasing sharply from 3.5 (per 100,000 population) in 2006 to 14.2 (per

100,000 population) in 2011. This reason was not mentioned in the report.

Table 5　Ranking of First 10 Groups of Causes of Deaths in Kosovo through sex in 2006

	Male			Female			Total		
	Diagnosis	Number	%	Diagnosis	Number	%	Diagnosis	Number	%
1	Diseases of the circulatory system	1525	63.15%	Diseases of the circulatory system	1241	67.74%	Diseases of the circulatory system	2766	65.13%
2	Neoplasms	333	13.79%	Neoplasms	213	11.63%	Neoplasms	546	12.86%
3	Certain conditions originating in the prenatal period	126	5.22%	Certain conditions originating in the prenatal period	95	5.19%	Certain conditions originating in the prenatal period	221	5.20%
4	Diseases of the respiratory system	203	4.78%	Diseases of the respiratory system	82	4.48%	Diseases of the respiratory system	203	4.78%
5	symptoms, signs and abnormal clinical and laboratory finings, not elsewhere classified	106	4.39%	symptoms, signs and abnormal clinical and laboratory finings, not elsewhere classified	72	3.93%	symptoms, signs and abnormal clinical and laboratory finings, not elsewhere classified	178	4.19%
6	Diseases of the genitourinary system	72	2.98%	Diseases of the genitourinary system	42	2.29%	Diseases of the genitourinary system	114	2.68%
7	External Causes	58	2.40%	Endocrine, nutritional and metabolic diseases	35	1.91%	Injury, poisoning and certain other consequences of external causes	74	1.74%
8	Endocrine, nutritional and metabolic diseases	31	1.28%	Diseases of the digestive system	20	1.09%	Endocrine, nutritional and metabolic diseases	66	1.55%
9	Diseases of the digestive system	30	1.24%	Diseases of the nervous system	16	0.87%	Diseases of the digestive system	50	1.18%
10	Diseases of the nervous system	13	0.54%	External Causes	16	0.87%	Diseases of the nervous system	29	0.68%

Source：Cause of death in Kosovo 2006 and 2007,Statistical Office in Kosovo supported by UNFPA (2009)

Table 6　Disease Statistics by Each Hospital (from 2008 to 2010)

No.	Region	Facility Name	Number of Inpatient	Number of Death	Number of Operation	Number of Delivery	BOR (%)
1	Prishtina	UCCK	87,399	1,157	14,096*	10,719	65.1
			87,489	1,274	14,096*	10,719	74.5
			84,911	1,324	25,978	10,574	70.1
2	Gjilan	Gjilan Regional Hospital	16,973	109	2,073	2,289	53.8
			16,983	148	2,050	2,155	53.4
			16,754	143	2,077	2,121	48.0
3	Peje	Gjacoba Regional Hospital	16,532	166	2,563	2,130	58.7
			17,030	173	2,479	2,028	57.4
			17,192	145	2,797	2,202	56.2
4	Peje	Peje Hospital	15,774	157	3,121	2,619	59.4
			15,929	180	3,534	2,552	56.5
			16,147	202	3,547	2,433	57.6
5	Prizren	Prizren Regional Hospital	26,393	318	5,299	4,391	65.0
			25,246	326	5,057	4,333	62.3
			25,668	309	5,287	4,295	61.9
6	Mitrovice	Vushtri Regional Hospital	3,467	4	1,222	847	49.5
			3,846	8	1,405	783	47.6
			4,213	2	1,658	650	48.0

7	Gjilan	Ferzaj Regional Hospital	3,211 2,893 3,380	3 1 5	199 70 101	1,913 1,787 1,701	34.8 34.4 39.2
8	Mitrovice	Mitrovice Regional Hospital	NA 1,436 688	NA 0 0	NA 271 147	NA 712 1,227	NA 27.0 78.1
9	Mitrovice	North Mitrovice Hospital	NA	NA	NA	NA	NA
10	Mitrovice	Zvecan Hospital	NA	NA	NA	NA	NA
11	Prishtina	Gracanice Hospital	NA	NA	NA	NA	NA

Note：Upper row (2008), middle row (2009), lower row (2010)
Source：Health Statistics Kosovo, 2008, 2009 and 2010, Statistical Agency of Kosovo

2.2 Health Administration, Health Budget and Health Policy

2.2.1 Health Administration

(1) Central Health Administration

The Ministry of Health plays a leading role in health administration, and it consists of six departments and 24 divisions. Figure 1 shows the organogram of the Ministry of Health.

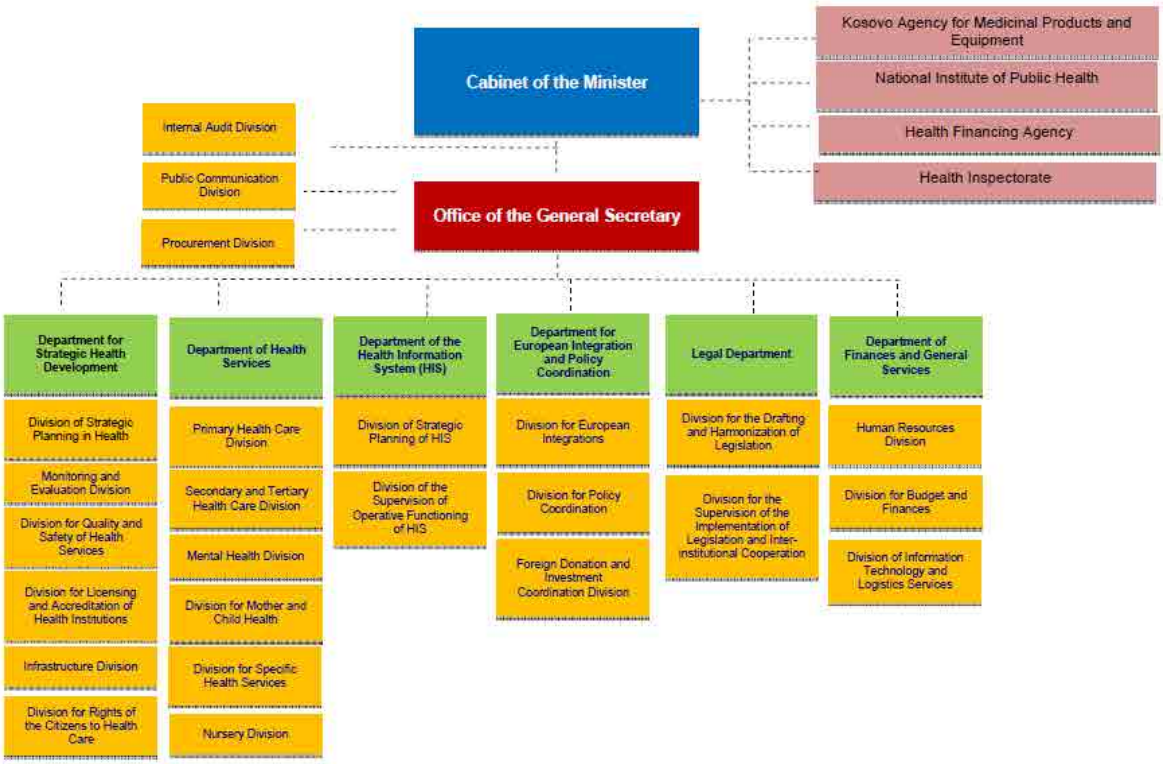

Figure 1　Organogram of the Ministry of Health

2.2.2 Health Policy

(1) Health Sector Strategy

To be affiliated with EU membership, the Ministry of Health has developed "Health Sector Strategy 2010-2014" to provide high-quality healthcare services to all the people, to meet the European standard. This strategy aims to achieve the Strategic Objectives that are set below.

Strategic Objectives：

a. Reduce morbidity and crude death rate[7]

b. Improve management of existing resources and quality of service

c. The function, reorganization and completion of the existing infrastructure of the healthcare system and the procurement of medical equipment in accordance with European standards

d. Implement and further development of Health Insurance System

e. Develop a sustainable funding system for the health sector

The Ministry of Health is in process of finalization of the Health Sector Strategy 2014-2020.

(2) Discussion of Health Sector Strategy

The Ministry of Health has developed the Health Sector Master Plan in 2008 supported by World Bank in order to implement the Health Sector Strategy. But the draft is still under discussion. The key issues were described as follows in the "report to Government of Kosovo-World Bank, Health Sector Master Planning Project".

1. Capital Investment and Maintenance of Buildings

There are clearly insufficient funds allocated to maintaining existing healthcare facilities and there is a clear preference shown for solving the poor maintenance issues by starting new buildings, without necessarily having a realistic plan in place to staff, equip and maintain the new facilities. Capital investment should be approved by the Capital Investment Committee. There should also be an associated Equipment Committee consisting of members with appropriate expertise. In addition, the maintenance budget for existing facilities should be increased to enable the condition of existing buildings to be raised to an acceptable standard for healthcare facilities. In regard to the procurement of specialized equipment, it is suggested that consideration be given to amending the procurement rules to enable the contracting of maintenance service for the anticipated life of the equipment.

2. Salaries

The relatively low salaries paid to health professionals in Kosovo has resulted in an almost

[7] The number of deaths over a period of time simply divided by the population.

complete lack of public sector pharmacists and drives doctors to practice privately in addition to their public sector employment. This has resulted in a number of suboptimal behaviors which undermine the public system. According to "Investigation into public health care in Kosovo" (Balkan Policy Institute, 2012), the average monthly salary is € 273.42 for a specialist, € 234.36 for a general practitioner, and € 175.77 for a nurse. Compared with the average salary in Kosovo € 281[8], the salary for health professional is low and it seems to lead the difficulty of securing the health personnel resources in Kosovo. It should be considered along with cross-sectorial salary issues.

3. Primary Health Care

Primary Care facilities are well positioned in Kosovo and provide superior levels of access. 80% of the population has access to some level of primary care in less than 10 minutes and 98% within 20 minutes. No further facilities should be constructed at this stage, but existing facilities should be made functional. The number of primary care staff is low compared to other countries but are within reasonable limits. The problem with primary care is that the doctors are not able to perform their primary care role because of lack of equipment, supplies, essential drugs and training. Therefore, the existing situation is that patients visit a tertiary care facility or a secondary without consultation from primary level facilities' staff. A number of the primary care buildings are in need of renovation or repair in order to allow safe functioning as a health facility and to enable staff to effectively perform their tasks.

4. Hospital Care

The number of acute care beds in Kosovo, and associated specialty doctors and nurses, is relatively low compared to other countries. However the number of attendance at health facilities is also low despite relatively high morbidity in the country, resulting in relatively low bed usage.

The location of second and tertiary level hospitals in Kosovo is quite satisfactory. In regards to tertiary care, access times are still satisfactory as there appears to be few areas that are in excess of 120 minutes access time to tertiary services (involving around 1% of the population)

If there is a case to be made for additional tertiary care facilities, then the obvious location would be Prizren as this would improve access for the west part of the country, as can be seen below. 98% would have access to tertiary care within 90 minutes, compared with 89% currently.

A number of new tertiary care units are suggested in the areas of oncology, stroke management, burns and cardiac surgery. These units would be supported by the negotiation of international agreements with a number of institutions to provide referral services and staff training.

As well as major reconstruction being needed at the UCCK and in the Mitrovice/ Vushtrri areas, a number of the regional secondary care buildings are in need of renovation or repair in order to

[8] Statistical Office of Kosovo, "Economic Statistics-Structural Business Survey 2005"

bring them up to an acceptable standard.

5. Laboratory and X-ray Equipment

The location of equipment is generally satisfactory, so patients theoretically have access to X-ray and laboratory tests, however the uncoordinated way in which the equipment is acquired means that maintenance is difficult and expensive and breakdowns are frequent.

6. Emergency Service

Secondary Care Emergency Departments are located at all the hospitals and this provides adequate geographic coverage for Kosovo. Emergency call-out centers are located in the UCCK. But the current state of the vast majority of the emergency vehicles is very poor with many vehicles not operating at all. There needs to be a complete overhaul of the emergency vehicle fleet with an estimated 90 new vehicles being needed nationwide.

7. Essential Drugs

Lack of availability of essential pharmaceuticals is a serious shortcoming of the Kosovo health system and may be discouraging patients from seeking needed care.

(3) Other Health Policy

To join the EU, the development of medical-related laws and regulations are also underway, the following are laws and regulations which are in the process of approval by the National Assembly, and agendas in the process of drafting.

- An amendment of Health Law which was enforced in 2004 (Once revised in May 2012)
- Law on Health Insurance System (approved of the Diet and waiting for signature of Prime Minister)
- Law on Medical Products and Medical Devices (approved by the Diet and waiting for a signature of Prime Minister)
- Law on Chambers of Healthcare Professionals (approved by the Diet and waiting for a signature of Prime Minister)
- Tobacco Law (Approved)
- Compensation Structure for public servants (Drafting)

Health Law which was initially enforced in 2004 to promote Health Sector Reform[9] was

[9] In general, it defined as the "Purposeful change for improving efficiency, fairness and effect of the health sector." Following policies targets are presented to define four defects which interfere with the progress of reduction of mortality, which are “improper allocation", "unfairness", "inefficient" and "explosion of health care costs," and interfere with a new commitment to health problems policy objectives. 1) To create an environment to enable the health promotion at home,2) To improve government investment on health,3) To promote involvement of private sector.
It collectively referred as “Health Sector Reform” that includes the introduction of medical insurance system which enables the people to share the fee of medical treatment and to enjoy equal quality of health services, and fundamental

comprehensively revised and approved by the National Assembly in April, 2014. According to the Minister of Health, the Health Sector Strategy (2014-2020) and its Action plan are now being finalized and will be published in April 2014. (It was not published yet as of 13 May).
The main point of the Health Sector Strategy (2014-2020) seems to change the operation system of 2nd and 3rd level hospitals. According to the plan, the operation of these hospital services is to be carried out by each diagnosis and treatment department.

At the present, there are 22 specialized departments in UCCK in Kosovo, but it has been planned to reduced them to 18 and add other new five specialized institutions (Occupational Institute, National Blood Transfusion Centre, Institute of Sport Medicine, Telemedicine Centre, and Institute of the Faculty of Medicine), then to attempt to operate such specialized hospitals and institutions individually. In addition to technical supervision, budget management and human resources management are to be operated by each department eventually. However, as an actual style of medical services provision, the system of conventional referral system will be inherited: tertiary care services are to be provided at the capital Pristina, whereas secondary medical services are provided at local hospitals. It means that each departments of UCCK in the capital of Pristina becomes the overall responsible agency for each service and its branch departments are to be located at seven regions across the country. Branch hospital of each region, aimed at standardization of medical services aim to technology exchange between regional hospitals and the capital Pristina, Branch hospitals of each region are to promote technology exchange between the community hospital and the other in the capital Pristina, aimed at standardization of medical services. In addition, medical services committee, named University Hospital and Clinical Service of Kosovo (UHCSK), is planned to organize to promote the efficiency of management by the service line.

The introduction of the management concept of specialty department hospital can be an effective policy to improve the quality of medical services and promote the provision of equal quality of medical services between regions. It, however, becomes concern that how to organize the way of the central medical care service in the process of promoting the specialist medical services. At the moment, the direction has not yet indicated by MoH on whether the central medical care service is to be developed by a unit of each department, or by a unit of each hospital. Therefore, it is required to device an appropriate prescription for it in the future.

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reform of health service management (i.e. by adapting a new management system based on each medical services and canceling the conventional management system based on each medical facilities.

2.2.3 Health Budget

(1) Health Budget and Expenditure in the Ministry of Health

Financial resources required for medical services are provided by the government. On the other hand, according to the household survey report took place in 2008 by the World Bank, the amount of informal payment from patients to health sector is equivalent to the amount of government and private sector's contributions to health sector, which is 40% of the total health expenditure. The government budget is sent from to the Ministry of Finance (MoF) to MoH, and the budgets for primary health facilities are sent from MoF via each municipality. According to the actual track record of 2013, about 28% medical expenditure was released for primary health care services (Health Centers), 22% for secondary health care services (regional and district hospitals), and 24% for tertiary health care services (UCCK). Other 25% are recorded as "others", and its breakdown is the cost for the management of blood center and dental centers, and the cost of pharmaceutical products. Approximately € 152 million has been contributed as government budget.

As the application of these budgets, 50% is allocated to wages and salaries, 32% is for medical services, 3% facilities and equipment expenses, 2% is for transport costs, and 13% is for health investment costs.

Table 7 Total Budget 2013 Including Capital Outlays

(Unit：EURO)

	MoH	Municipality	Total	GDP per Capita (€)	%
Primary Health Care	90,616	42,658,541	42,749,157	22.7	28
2nd Level Healthcare ＋ Mental Health Care	30,776,710	2,809,707	33,586,417	17.8	22
3rd Level Healthcare	36,946,508	-	36,946,508	19.6	24
Other	37,798,028	-	37,798,028	20	25
MoH	1,191,283	-	1,191,283	0.6	1
Total	106,803,145	45,468,248	152,271,393	80.7*	100
%	70	30	100		
Per capita	56.7	24.1	80.8*		

Remarks:

The amount of contributions from the Ministry of Health is send by the Ministry of Finance via the Ministry of Health. The numerical value of per capita is calculated by using 1,883,000 as a total population of Kosovo, thus there are differences from the figures shown in Table 1.

* Mark: the difference is caused to a number in the handling of the decimal point.

Source: MoF, Kosovo and own calculations

From Table 7 and Table 8, as the total health care costs in Kosovo, it can be observed that about € 263 million has spent together (the amount would be about 36.82 billion yen if € 1 is equivalent to ¥140), in which about 152 million euros from the government budget (including the local government budget), and about 111 million euros from private sector. From Table 8, it is also observed that the government budget on health has been increasing year by year from 2009 to 2013, and even though a percentage of health spending to government spending was only 5.6 % in 2009, but it rose to 6.7% in 2013. According to the Ministry of Health, the number of patients of cardiovascular disease and tumor which needs more expensive medical costs is increasing, the government expenditure seems to have also increased. Furthermore this situation derives from the formulation of the system to ensure fiscal budget, supported by the development of laws related budget allowance.

Table 8 Change in Central Government Allocation for Health 2008 to 2013

(Excluding PHC) in Euro

Categories	2009	2010	2011	2012	2013
GDP Current Prices	34,008	4,291	4,776	5,015	5,205
GDP per Capita	2,293	2,418	2,650	2,783	2,889
Total Central Budget for Health	66,000,000	72,000,000	79,000,000	89,000,000	107,000,000
% of GDP for Health	1,192,000,000	1,458,000,000	1,612,000,000	1,524,000,000	1,591,000,000
Government Expenditure	5.5	4.9	4.9	5.8	6.7
% Increase in Central Budget for Health %		9	9	12	20
Government Expenditure for Health *	1.7	1.7	1.7	1.8	2.1
% of GDP for Health including PHC	2.4	2.4	2.4	2.5	2.9
% of GDP for Health including Private Spending	3.9	4.0	3.9	4.2	4.5

Remarks: * a medical fee that is allocated to hospital medical services

Source: Ministry of Finance, Kosovo and own calculations

Health expenditure for public health and the private health sector to GDP of Kosovo is in the lower level among the EU. According to the information of 2010 of the Organization for Economic Co-operation and Development (OECD), whereas the average of the sum of in the private and public health to GDP was 9.0% of EU countries, Kosovo was as low as 4.5%. Moreover, health spending varies depends on each local government. According to the listening from the Ministry of Health, health spending per citizen of Pristina a year, is 45 euros (the sum total of public health and private sector), whereas 17 euro in Malishevë means that there is nearly three times difference between the regions. Since a regional difference can be seen in the medical

services of the PHC which is familiar to most people, the impact on health status would be a concern due to the difference in the medical delivery systems.

2.3 Current Situation of the Health Sector in Kosovo

2.3.1 Medical Statistics

(1) Medical Delivery System

There three types of public health facilities in the nation: Primary Health Care (PHC) Facilities, Regional Hospitals, and University Hospitals in the nation. Main Family Medicine Centers (MFMCs), Family Medicine Centers (FMCs), Ambulatory Care Clinics, and Women Wellness Centers (WWC) belong to the PHC. As the Table 9 indicates, there are ten secondary facilities: Regional Hospitals which are located in the center area of each region. (Except Peje) Other than regional hospitals, there are three city hospitals in Mitrovice, Ferazai, and three more in the Serbian area, all of which provide secondary health services.

Table 9 Administrative Districts and Regional Hospitals

Region	Centre	Area (Km2)	Pop	Municipality
1. Mitrovice	Mitrovice	2,052	234,435	Mitrovice Leposaviq Skenderaj **Vushtri** Zubin Potok *Zvecan* *Veriole*
2. Prishtina	Prishtine	2,288	487,155	Prishtine Gllogoc Fushe Kosove Lipjan Novoberde Obiliq Podujeve **Gracanice** Ranillug
3. Peje	Peje	1,364	176,134	Peje Istog Kline
	Gjakove	1,224	198,838	Gjakove Decan Rahovec Junik
4. Prizren	Prizren	1,739	335,780	Prizren Dragash Suhareke Malishve Mamushe
5. Gjilan	Gjilan	1,220	178,621	Gjilan

				Kamenice Viti Kllokot Partesh
	Ferzaj	1,021	187,664	**Ferzaj** Shtime Kacanik Shterpce Hani Elezit
		10,910	1,798,645	

Source: Survey Team

Hospitals which provide tertiary health services are University Clinical Center Kosovo (UCCK）, National Institute of Public Health, Occupational Institute, National Blood Transfusion Center, Institute of Sport Medicine, Telemedicine Center, and Dentistry University Clinical Center.

UCCK is only public institution which provides tertiary health care. It has 32 medical departments and educational functions for health workers. National Institute of Public Health belongs to the same tertiary health facility; however, it controls and prevents the epidemic and work for the safety of the food as well as related livestock.

There is difference in provided health service accordance with the level of the health facilities. PHC for example, Immunization, Health Education, Perinatal and Antenatal Care, Family Planning which do not include in patient service. It also refers patients to upper level hospitals.

Secondary health facilities provides medical services specialized diagnosis, treatment and in patient medical and minor surgical service along with primary health care services. The majority of diseases at secondary health facilities are such as hypertension, diabetes, flue, or pneumonia.

The tertiary health facility, on the other hand, provides more specialized health services. Internal Medicine, for example, is divided into Hematology, Gastroenterology, Endocrinology, Cardiology, and Rheumatology with each specialized doctor in the tertiary health facility.

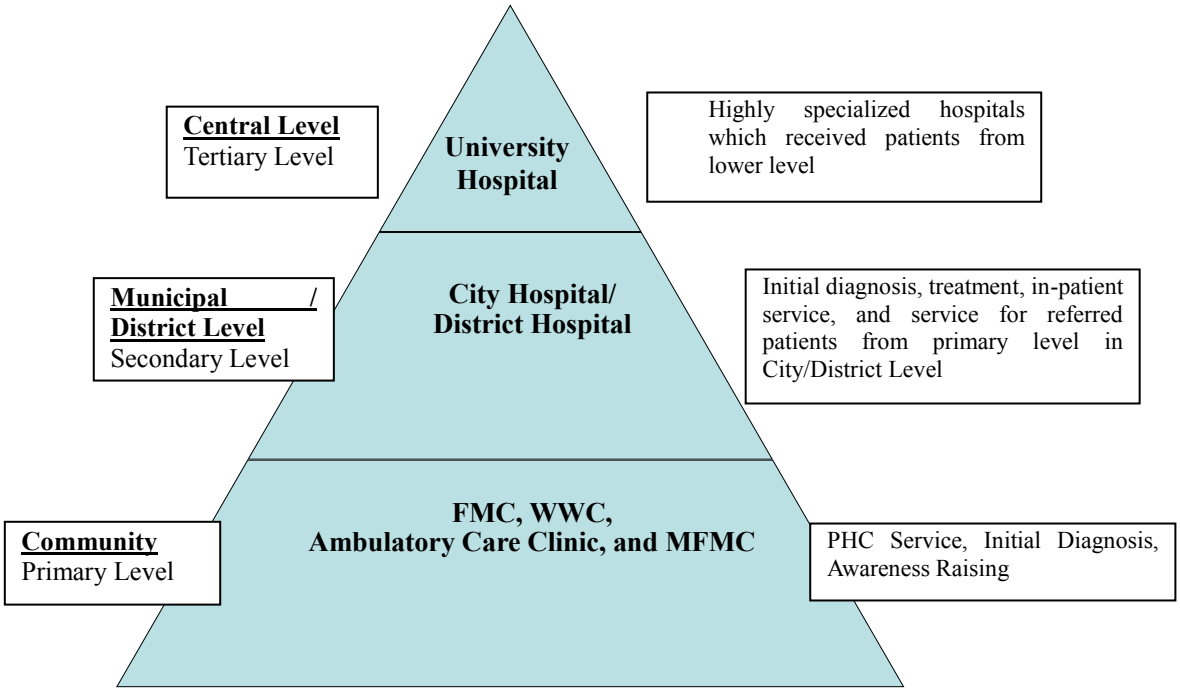

Figure 2　Referral System in Kosovo

Table 10　Contents of Health Services at Each Health Facility

	Name of Facility	Covered Area	Content of Health Service
Primary Level	FMC	Community Level	Emergency Medicine, Immunization, Health Education, Perinatal and Antenatal Care, Family Planning, Minor Surgery, Diagnosis, Rehabilitation, Providing pharmasticals Product
	WWC		Health Education Related with Reproductive Health, Perinatal and Antenatal Care, Service for Obstetrics and Gynecology
	Ambulatory Care Clinic		Emergency Medicine, Immunization, Health Education, Perinatal and Antenatal Care, Family Planning, Minor Surgery, Diagnosis, Rehabilitation, Providing Pharmasticals Product
	MFMC		Emergency Medicine, Immunization, Health Education, Perinatal and Antenatal Care, Family Planning, Minor Surgery, Diagnosis, Rehabilitation, Providing pharmasticals Product (It is supervising FMCs in the authorized area)
Secondary Level	Regional Hospital (8)	Regional Level	Surgery, Pediatric, Obstetrics and Gynecology, Dental, Internal Medicine for Inpatient, Service for Referred Patients from Primary Health Facilities *Excluding Secondary Mental Health Hospitals
	City Hospital (2)	City Level	
Tertiary Level	National Hospital	National Level	Highly Specialized Medical Service and Medical Research

Source：Health Sector Strategy (2010-2014) and MoH

(2) Change in Number of Health Facilities and Doctors

In 2002, there were 381 public health facilities (Primary Health Facilities: 364, Secondary Health Facilities 10, Tertiary Health Facilities: 7) and 1,421 registered private hospitals in total in Kosovo (Primary Health Facilities 905, Secondary Health Facilities: 516). [10]

The total number of beds in public health facilities in Kosovo was 3,994 (Secondary Health Facilities: 1,900, Tertiary Health Facilities: 2,094) in 2008. In 2009, 3,764 beds were at public health facilities (Secondary Health Facilities: 1,935, Tertiary Health Facility: 1,829) and by 2010, the number of beds in public health facilities was 3,897 (Secondary Health Facilities: 1,927, Tertiary Health Facilities: 1,970). As those statistics shows, there has not been a significant change: Number of beds change in secondary health facility: +27 (+1.4%) and -124(-5.9%) at the tertiary health facilities. [11]

2.3.2 Progress of Relevant Projects

The number of health workers in different areas in Kosovo according to the Statistical Office of Kosovo in 2003 is on the following Table 11 below;

[10] Performance Study of Health Sector 2012（Ministry of Health）
[11] Health Statistics 2008-2010（Statistical Agency of Kosovo）

Table 11　Number Health Workers in Kosovo

Region/	Municipality	Doctors	Stomatologists	Med. Technician	Pharmacists	Med. Associate	Non-medical	TOTAL
Mitrovice	Mitrovice	73	11	404	–	20	144	652
	Leposaviq	–	–	–	–	–	–	–
	Skenderaj	16	2	122	–	–	33	173
	Vushtri	30	5	225	–	2	57	319
	Zubin Potok	–	–	–	–	–	–	–
	Zvecan	–	–	–	–	–	–	–
	Veriole	–	–	–	–	–	–	–
Prishtina	Prishtine	900	136	2,310	4	59	1,361	4,770
	Gllogoc (=Drenas)	24	2	123	–	–	45	194
	Fushe Kosove	20	4	43	–	2	20	89
	Lipjan	25	5	112	–	1	41	184
	Novoberde =(Artana)	1	–	11	–	–	5	17
	Obiliq	38	5	100	–	6	41	190
	Podujeve	37	5	139	–	2	67	250
	Gracanice	–	–	–	–	–	–	–
	Ranillug	–	–	–	–	–	–	–
Peje	Peje	170	26	539	1	21	269	1,026
	Istog (=Burim)	16	5	76	–	–	35	132
	Kline	20	2	80	–	–	36	138
	Gjakove	174	33	578	–	19	245	1,049
	Decan	31	7	91	–	–	18	147
	Rahovec	16	6	76	–	1	29	128
	Junik							0
Prizren	Prizren	246	37	761	1	14	301	1,360
	Dragash	16	5	56	–	1	22	100
	Suhareke (=Theranda)	16	7	93	–	1	33	150
	Malishve	17	5	77	–	1	29	129
	Mamushe	24	5	111	1	–	54	195
Gjilan	Gjilan	189	20	547	–	9	233	998
	Kamenice							0
	Viti	12	4	103	–	1	48	168
	Kllokot (=Vitina)	–	–	–	–	–	–	–
	Partesh	–	–	–	–	–	–	–
	Ferzaj	62	16	347	3	4	129	561
	Shtime	14	2	42	–	–	16	74
	Kacanik	5	4	80	–	2	30	121
	Shterpce	21	4	63	1	–	20	109
	Hani Elezit	–	–	–	–	–	–	–
	TOTAL	2,213	363	7,309	11	166	3,361	13,423

Source：Employees in Public Health Sector 2004, Ministry of Health

There are 2,213 medical doctors from primary to tertiary health facilities of which 1,202 are specialized doctors (55%), 718 specialized doctors (32%) and 293 no specialized doctors (13%). In Pristina, there are 301 non specialized doctors and 534 specialized doctors. More than half of the dentists provide their services in Pristina.

Table 12　Number of National Doctor and Stomatologist

	In Specialization*	No Specialization	Specialist	Total
Doctor	718	293	1,202	2,213
Stomatologist	71	192	100	363

*The doctor in training to become a specialist doctor
Source：Employees in Public Health Sector, Ministry of Health (2004)

There are 850 doctors working in primary health facilities and 423 of them (49%) are specialized doctors, 276 of them (32%) are no specialized doctors and 151 of the doctors (17%) are in specialization.

Table 13　Number of Doctor at Primary Health Facilities

	In Specialization	No Specialization	Specialization	Total
No.	151	276	423	850

Source：Employees in Public Health Sector, Ministry of Health (2004)

596 doctors are allocated in secondary health facilities. The breakdown of the doctors are: 348 specialized doctors (58%), 2 no specialization doctors (2%) and 246 doctors in specialization (41%).

Table 14　Number of Doctor at Secondary Health Facilities (Regional Hospitals: 7)

Region	In Specialization	No Specialization	Specialist	Total
Prizren	51	1	56	108
Gjilan	71	-	52	126
Mitrovice	-	-	47	47
Peje	42	-	70	112
Prizren	77	-	91	168
Prishtina	-	1	19	20
Ferzaj	2	-	13	15
計	246	2	348	596

Remarks：The information does not include there city hospitals in the Serbian area.
Source：Employees in Public Health Sector, Ministry of Health (2004)

Table 15 shows number of doctors in the tertiary health facility. No specialization doctors are allocated which is one of the differences between the tertiary health facility and lower health facilities.

Table 15 Major Departments and their Number of Doctors at a Tertiary Health Facility

Department	Doctor	Department	Doctor
Surgeons	80	Neurology	44
Orthopedics	61	Internal Disease	74
Urology	30	Infectious Disease	30
Neuron-Surgery	27	Surgery of Children	32
Obstetrics and Gynecology	111	ORL	43
Physiatrist	26	Ophthalmology	35
Psychiatry	30	Anesthesia	61
Throb	60	Dermatology	31
Pediatrics	63	Others	32
	Total	870	

Source：Health Statistics, Statistical Agency of Kosovo (2010)

2.3.3 Allocation of Medical Staff

(1) Organization, Health workers and their Development Plan

Human Resource Division under Department of Finances and General Service in MoH is a responsible figure for the number of health workers and their development.

(2) Educational Opportunities for Major Health Workers

Faculty of Medicine, University of Pristina is only public educational institute in Kosovo for medical doctors and dentists. Faculty of Medicine, University of Pristina has been integrated into UCCK and works as a part of it. Its faculty of medicine has five departments in total: faculty of medicine, department of dentistry, department of pharmacy, department of physiology, and department of nursing for medical doctors, dentists, pharmacists, physiologist, and nurses.

Doctors are given an opportunity to take a national exam after six years of education at the medical school with one year of the internship at the hospital. Once they pass the national examination, they are successfully recognized and given their medical license as general practitioners. Two years of working experience at primary health facilities is required for receiving medical education to be specialist's[12].Additionally, it is mandatory to work from specialized departments for four to five years as residents. Medical doctors, pharmacist, dentists are required to have national licenses after passing national examinations. Other medical professions are able to get their licenses after the accomplishment of each school's examinations.

[12] Medical Education in Kosovo, 2011 (Med Teach)

Table 16　University of Pristina “Hasan Pristina”

Profession	No. of Students in total	No. of Enrolled Students (2012)	Period of Study	Period of Internship	Tuition/ Year
General Doctor	1,508	394	6 Years, third and fourth year for specialization	12 Month	100/EURO
Dentist	652	255	6 Years, third and fourth year for specialization	12 Month	
Pharmacist	295	125	5 Years	12 Month	
Nurse	416	139	3 Years	6 Month	
Mid-Wife	178	53	3 Years	6 Month	
Physiatrist	313	151	3 Years	6 Month	

Source：Questioner from Faculty of Medicine, University of Pristina “Hasan Pristina”　Medical Education in Kosovo, 2011 (Med Teach)

(3) Challenges in Development of Health workers

The following points are the challenges that Kosovo is currently facing:

1) Lack of Academic faculty in Nursing and Physiotherapy

Even though there are adequate number of academic faculties in school, departments such as nursing (including education of mid-wife), and physiotherapy tend to have less number of the faculties needed who have appropriate background as well as educational background at higher education.

2) Lack of Educational Medical Equipment

Medical model for the educational purpose and the medical equipment related with laboratory shall be supplied further, especially equipment at the laboratory has not functioned well as the budget for the consumable is unstable.

2.3.4 Health Insurance System

Health insurance in Kosovo is tax based and three percent out of the total GDP is for the expenditure of health services. Patients however, have had difficulties to access necessary health care services at the health facilities as they have to pay most of the medical charges.[13] Therefore the introduction of the health insurance system is one of the urgent issues in the health sector.

Kosovo approved Law on Health Insurance in 2006 and has introduced its health insurance system. The system will use withholding tax system for the purpose of the allocating additional

[13] Kosovo Health Financing Reform Study, World Bank (2008)

revenue for the public health service.

The new organization structure in the health sector has been approved in the new law for the introduction of health insurance system reform. Kosovo declares at the same time its medium-term strategy setting health achievement as its goal in the Declaration of Medium-term Policy Priorities 2014-2016 which specifically mentions to organize Health Insurance Fund for the responsible institute of introduction.

The draft of the law on health insurance is on the following Table 17.

Table 17　Outline for the Draft Law on Health Insurance

Purpose of Health Insurance	All the citizen and the residents to be able to access quality of health care which eventually leads to reduce financial burden and achieve the improvement of health indicators.
Target Population	Regular employee above 18 years old（Insured person's spouse and children under 18 are included in his or her insurance.）
Target Health Service	Basic health service, Emergency medicine, and pharmaceutical for both services.
Fee	Insured person and its employee shall be responsible 7 % equally in accordance to the income.
Exemption	Family with social assistance, prisoner, people with disabilities because of the war, and elderly.

Source：Draft of Law on Health Insurance, Ministry of Health

2.3.5　Health Information Management System

National Institute of Public Health is a responsible institution for the health information management system other than Department of Health Finance and service at MoH. The function of the health information management system in Kosovo still faces challenges as the census had not been done after the war for ten years. Health Sector Strategy 2010-2014 suggested the following four prioritized areas in health information management system to be improved:

1) Registration of the Patients

The registration of the patients shall include clinical registration, support system for the process of medical determination for the disease, information for the referral and its medical charge. The information for the presentation and control of the epidemic are expected to be improved.

2) Integrated Health Information System

The quality and quantity of the information from the public health facilities and health information from private health facilities are the priory's area.

3) Information for the provided health care, its pharmaceutical, and its fee shall be included.

4) Stable budget allocation for the health information management system

Luxemburg Dev has started its assistance to Kosovo on the challenges on the health information management system since December 2013. [14]

2.3.6 Emergency Medical System

Emergency medical service has provided at primary, secondary and tertiary health facilities. MFMCs which work as primary health facilities are the initial facilities to be reached for the patients and examine the necessity of the referral of the patients for upper level. Some of MFMCs have no capability to provide examination such as general X-ray and testing. Pristina City Emergency Center[15] which works as a primary health facility, however, is the only primary health facility which has capabilities for providing comprehensive emergency health care in the nation. Each MFMC has its own emergency call service for 24 hours and an ambulance with a doctor direct to the patients. All the secondary health facilities have its emergency center and ambulance which are used to transporting patients to UCCK for many cases. Current existing medical equipment at secondary health facilities are differed in accordance to respective facilities.

Lack of medical equipment for emergency health care at UCCK, a tertiary hospital located near the Pristina City Hospital and receiving many of its referral patients, causes challenges to provide adequate emergency health service. Other challenges that UCCK is facing are such as inadequate maintenance for medical equipment and overflow of the patients all of which obstruct to provide health services. UCCK is therefore, currently expanding its annex building for the emergency medical center. Improvement of the emergency medical care is on Health Strategy 2010-2014 which also mentions the capacity development of medical doctors and nurses as well as developing the national guideline for the emergency health care.

2.4 Trends of Aid by Other Development Partners

Many development partners supported for medical facility and equipment for the purpose of both humanitarian and reconstruction in post-conflict period. Then the priority areas for development assistance are shifted soft support such as development of laws and improvement of management skills.

Currently, major bilateral donors in Kosovo health sector are Luxembourg, Switzerland, and Italy. France and Germany are also exploring the possibility of providing supports. As for multilateral donor agencies, the World Bank and the EU have been active in addition WHO, and the UNICEF.

[14] Service Provision for the Health Information System (HIS) Software in Kosovo ,Lux, Dev (2012)
[15] Report to Government of Kosovo, Health System Network Master Plan ,World Bank (2008)

The Bank also assisted the drafting of the Kosovo country support master plan in 2007, and donor agencies and the donor countries have been implementing their operations in line with the framework. Assistance related to the construction of a health financing system and health management system associated with the health sector reform has been increasing as a recent trend. Japan as well has proceeded with the assistance mainly in the field of human resource development, by sending trainees to issue-specific training courses in Jana, such as 5S-KAIZEN-TQM and health system strengthening. According to the Ministry of Foreign Affairs national data book in Japan, Japan had accepted in-country training (2008 or later, 3-4 people in total), provided ambulances and medical equipment related to emergency medical services by grassroots grant aid cooperation, (2008-2012, approximately 80 million yen in total).

Though the loan projects in health sector are still not many, in addition to the World Bank, loan plans of the Australian Government and the Islamic Development Bank are in the planning stage. For example, the Health Ministry has already agreed with the World Bank on loan project (25 million USD) for health care reform program and drug procurement system strengthening by setting up compulsory insurance system, which was aimed at health financial strengthening, the Islamic Development Bank on the construction project (34 million Euro) of an emergency medical center, and the Australian Government on the project (total 9.5 million Euro) of cardiac surgery-related hospital function strengthening, and health system management.

A current aid trend of development partners in Kosovo health sector is shown in Table 18, and programs and projects currently underway and past five years are also shown in Table 19.

Table 18　A Current Aid Trends of Development Partners in Kosovo Health Sector

Development Partners	Priority Area of Assistance
Luxembourg Cooperation	Strengthening governance/ Health Information Management/ Improvement of health facilities
Swiss Cooperation	Improvement of the quality and accessibility of health services with a particular focus on socially vulnerable communities
WHO	Maternal and Child Health/ Support to the most vulnerable group/ Emergency Medical Services
UNDP	A part of Public Administration Reform - Integrity Planning, and support on capacity development (UNDP does not work on the health sector per se.)
World Bank	Reproductive Health/ Child Health/ Health in Adolescence/ Nutrition/ Infectious Disease/ Non Communicative Disease/ Health System/ Health Financing/ Health Information Management
EU	Child Health/ Health System/ Health Information Management
Global Fund	Infectious disease (HIV/AIDS,TB)/ Health system strengthening (Improving procurement, Supply chain management [for medicines, health products, health equipment])

Source: Questionnaires from donors, information from donors' HP

Table 19 Programs and Projects Currently Underway and Past Five Years in Health Sector

Development partners	Ongoing and the past five years programs and projects	Amount of support	Duration
Luxembourg Cooperation	・ Strengthening governance (Strengthening the management capacity, the institutional framework , the legal framework for public/private providers and regulating the entire system for delivery of health care services) ・ Introducing a protocol concept of health and medical diagnostic and treatment procedures ・ Improvement project for Prizren Regional Hospital by construction and renovation of NICU	No data	No data
Swiss Cooperation	・「Support to Clinical Psychology and Psychotherapy in Kosovo」 ・「Contribution to World Bank's Improving the Quality of Healthcare in Kosovo」	USD 670,000 USD 250,000	2012-2015 2013-2014
WHO	・「Emergency Medical Services in Main Family Medicine Centre」 ・「Mother and Child health program」 ・「Building a better future for citizens of FushëKosovë/Kosovo Polje and Obiliq/Obilić: Participation, Protection, and multi-ethnic Partnerships for improved education, health and sustainable livelihoods」	No data EUR 2,524,200 EUR 275,418	2011 2012-2016 2013-2015
World Bank	・「Strengthening the capacity of the Health Financing Agency」 ・「Kosovo Health Technical Assistance」	USD 560,000 USD 250,000	2012-2016 2013-2014
Islamic Development Bank	As for the construction of "University Clinical Center of Kosovo Emergency Center" under the auspices of the loan which MoH is considering for several years, the MoH is currently negotiating with Ministry of Finance after gaining the consensus within MoH.	EUR 34,000,000	No data
EU	・「Sector Wide Approach in Health: feasibility study and mapping」 ・「Support of the Health Sector - Capacity Building of Kosovo Medicines Agency」 ・「Capacity Building to implement state of the art surveillance systems for antibiotic consumption and resistance in Kosovo」	EUR 499,420 EUR 1,000,000 EUR 235,647	2009-2010 2010-2012 2012-2014
Global Fund	・「Scaling up HIV Prevention in Kosovo」 (KOS-708-G02-H) ・「Maintaining and Scale up Tuberculosis Prevention and Treatment Activities in Kosovo」 (KOS-911-G05-T) ・「Scaling up HIV Prevention in Kosovo」 (KOS-711-G04-H) ・Assistances for Health Infrastructure and Medical Equipment (under "TB Round 9") (1) Medical equipment for various laboratories and hospitals (peak flow meter, equipment for pleural drainage, instrument for pleural biopsy, sphygmomanometer, bronchoscope, spirometer, laboratory reagents etc.)	EUR 2,137,121 EUR 2,420,929 EUR 2,481,556	2008-2010 2011-2014 2011-2014 2011-2013

	(2) Renovation of Lung Hospital in Pristine (3) Medical equipment for Hospitals in Mitrovica and Peja (X-Ray machine for each hospital)		2012-2013 2013

Source: Questionnaires from donors, interviews from donors, information from donors' HP

The following are details of the support of major donors:

1) Luxembourg Cooperation

Luxembourg is the leading donor of bilateral aid, and it also plays a secretarial role of health sector donor meetings which have been held on a regular basis. It has been implementing comprehensive technical assistance projects from 2009 and regarding 2009-2014 as their first phase and 2015-2018 as their second phase of cooperation. As program detail, they has sent experts to the Ministry of Health and promoted to strengthening governance and human resource development. It has also been supporting to improve legal systems, build health information management system (HMIS), and trying to introduce the medical protocol concept. Furthermore, it has been engaging in developing the neonatal intensive care unit (NICU) in the Prizren region. These supports have been one of the largest support activities for Kosovo as Luxembourg, and the assistance in Prizren region has attracted attention as a unique support for a regional hospital. In addition, as part of human resource development, some doctors and nurses have been sent for specialized training on long or short term at universities in Germany and Turkey.

2) Swiss Cooperation (SDC)

Based on the Kosovo Cooperation Strategy 2013-2016, the priority of the Swiss health support programme will be to improve the quality and accessibility of health services to the population of Kosovo, with a particular focus on socially vulnerable communities.

To achieve this goal, SDC's intended outcomes are; 1) A significant contribution provided for a successful implementation of the envisaged health reforms, leading to an increased financing for health and an improved management of health services; 2) enhanced access and quality of health care for all Kosovo citizens, with particular attention to the needs and inclusion of socially vulnerable communities.[16]

Switzerland has supported mental health in Kosovo for several years. The support provided to introduce the concept of community-based mental health has been very successful. The support entailed the construction of facilities (Community-based Mental Health Centers, Community Houses of Integration, and Intensive Psychiatric Care Unit at the tertiary level), trainings and support for managing the services.

[16] Swiss Cooperation Strategy Kosovo 2013-2016

Projects that are currently supported are as follows:

(1) "Support to Clinical Psychology and Psychotherapy in Kosovo"

(Duration: June 2012 to September 2015, Commitment Amount: US$ 670,000)

The project will contribute to enhancing the professionalism and quality of mental health services in Kosovo, further widening the scope and types of services offered. The project will support the Ministry of Health in establishing a comprehensive post-graduate training programme in clinical psychology, including training the supervisors' approach for further replication. A by-law protected title of Clinical Psychologists as a recognized health profession will be awarded at the end of the programme.[17]

(2) "Contribution to World Bank's Improving the Quality of Healthcare in Kosovo"

(Duration: September 2013 to June 2014, Commitment Amount: US$ 250,000)

The cooperation with the World Bank (WB) aims to contribute to the development of a sustainable health system in Kosovo that offers quality services to its population and the opportunity to leverage lessons from health reforms for Western Balkan countries. This intervention will make use of WB's expertise, experience and leverage in strengthening the capacities of Kosovo authorities to make well-informed policy decisions based on evidence and best practices in order to implement successfully the envisaged reforms.

Some of the above-indicated themes (e.g. Reproductive health, non-communicable diseases, governance & management of health services) might become the priorities of some components of our intervention (currently in planning stage).

SDC is currently in the planning phase of two major interventions:

1) A Swiss Trust Fund with the World Bank (the purpose of which is to assist the Ministry of Health in implementing health reforms, focusing on the procurement of drugs, an improved targeting mechanism for mandatory health insurance & the implementation of the health insurance)
2) The bilateral intervention, Affordable Quality Healthcare project (AQH) is expected to commence in early 2015, following a tender process to select an implementing partner (to be conducted in the 2nd part of 2014). The main themes of AQH will be quality, accessibility & affordability of health services. The project will be focusing its interventions in the primary health care level of the system. In order to improve the quality and affordability of health services, AQH will support through a range of actions, the managers of health facilities, the providers of health services as well as the patients and the larger population with health promotion & awareness activities.

[17] Swiss Cooperation programme in Kosovo List of ongoing projects September 2013(PDF data)

3) WHO

WHO is currently implementing following two projects.

(1) “Mother and Child Health Program”

(Duration: 2012 to 2016, Commitment Amount: EUR 775,000)

The project aims at supporting to promote family planning, safe motherhood and vaccination of children, to prevent HIV / AIDS/STD and to reduce maternal smoking rates.

(2) “Building a better future for citizens of FushëKosovë/Kosovo Polje and Obiliq/Obilić: Participation, Protection, and multi-ethnic Partnerships for improved education, health and sustainable livelihoods”

(Duration: 2013to 2015, Commitment Amount: EUR 275,000)

There have been continuous efforts to improve the basic health service provision at municipal level, especially targeting the marginalized population who lack the economic or social power to make informed health choices, enable access based on equity, mitigate environmental hazards and improve access to services.[18]

4) World Bank

World Bank is currently implementing the following projects:

(1) “Strengthening the capacity of the Health Financing Agency”

(Duration: November 2012 to January 2016, Commitment Amount: US$ 560,000)

(2) “Kosovo Health Technical Assistance”

(Duration: December 2013 to August 2014, Commitment Amount: US$ 250,000)

The World Bank is in the process of developing and finalizing a 5-year health sector project, the Kosovo Health Project (funding equivalent to US$ 25.5 million), with the objective of improving financial protection from the costs associated with health care and quality of care for priority health services. Towards this objective, the proposed Project will support the implementation of health sector reforms, particularly mandatory health insurance reforms and performance-based purchasing of primary health care services. Since in Kosovo, a public expenditure share for the health sector is low, and people are bearing heavy burden on the relatively expensive medical costs, the Project aims at improving this situation. The Project also aims at increasing the health revenue by improving the compulsory health insurance system, to provide the health services of the highest possible quality and more efficiently within the limited resources. To do this, the Project prioritize to invest in maternal and child health-related medical equipment for primary health care facilities and hospitals, and the development of health information management

[18] UNDP HP: Annual Report Kosovo

system which would contribute to decision-making process. Also, the poor and the vulnerable are to be exempted from paying insurance fees and to be guaranteed an access to health services. It is also planned to support capacity building for local government facilities, health facilities, and service providers who work in those facilities. If approved by the World Bank Board and ratified by the Kosovar Parliament, the Project should become effective in October 2014.[19]

5) European Union (EU)

EU is currently implementing a project of "Capacity Building to implement state of the art surveillance systems for antibiotic consumption and resistance in Kosovo"(Duration: July 201 月 to December 2014, Commitment Amount: EUR 235,647).

The goal of this project is: To increase research capacity in the public health sector in Kosovo in order to determine the prevalence of antibiotic resistant bacteria and to improve the quality of antibiotic prescribing in Kosovo, with the overall aim to improve the health and wellbeing of patients infected with antimicrobial resistant organisms and their families in Kosovo.

Target groups are doctors, trainee doctors, pediatricians, neonatologists and health care workers prescribing antibiotics, PhD student of National Institute of Public Health Kosovo (NIPHK), laboratory technician at central and regional hospital level.

Main activities of the project are follows:

- Conduct surveillance of antibiotic consumption through a hospital web-based one-day Point Prevalence Survey (PPS) of antimicrobial use in all Kosovo hospitals.
- Conduct surveillance of antibiotic resistant bacteria in hospital and community-acquired infections through the improvement of central and regional laboratory capacity [20]

Health sector is not one of the priority sectors for EU assistance for Instrument for Pre-Accession Assistance II (IPAII 2014-2020), and EU in Kosovo have not had any project in procuring equipment.

[19] According to "World Bank, Press release (May 13, 2014)", it has already approved by WB Board. (http://www.worldbank.org/en/news/press-release/2014/05/13/world-bank-health-reforms-kosovo)

[20] http://www.gnkra.com/projects/eu-grant/?language=default

Chapter 3

Chapter 3 Survey of Relevant Medical Infrastructure in Kosovo

3.1 Survey of Relevant Medical Infrastructure

3.1.1 Current Situation of Existing Public Hospitals and Health Centers

Public health facilities in Kosovo are allocated based on governorate administrative boundary. Primary level health facilities are managed by communes, while secondary and tertiary level health facilities are managed by the MoH. The survey team made analysis on these health facilities based on published and/or obtained statistical information. Also, the survey team obtained answers to questioners from selected health facilities. Field visits were made to selected facilities as shown in Table 20. It is to be noted that target local hospitals in this survey were selected based on the advice of the Ministry of Health, by taking into account of the scale of facilities and time constraints of the study.

Table 20 Target of Survey

Facility name	Category
Mitrovice MFMC	Primary Level Health Facility
Gjacoba MFMC	Primary Level Health Facility
Mitrovice Regional Hospital	Secondary Level Health Facility
Gjacoba Regional Hospital	Secondary Level Health Facility
Prizren Regional Hospital	Secondary Level Health Facility
UCCK	Tertiary Level Health Facility

3.1.2 Activity on Primary Level Health Facility and Condition of Medical Equipment

(1) Statistic Data Analysis

Health statistics is annually published by Statistical Agency of Kosovo. It is available up to version of year 2010. This data is officially published by Kosovo Government. However, MoH explained to the team that the accuracy of data is subspecies because of an immature data collection mechanism. Major diseases in primary health facility are reported as Table 21. However, it is identified by field visits that there are functional differences in primary health facilities, especially MFMCs according to areas.

Table 21 Major Diseases (Health Center)

Disease		Number	Percentage
1	Parasite Diseases*	53,762	28.0%
2	Circulation and End Criminal Metabolic diseases	25,212	13.1%
3	Eye Diseases	21,320	11.1%
4	Ear and Mastoids diseases	18,989	9.9%
5	Cerebral Blood Vessel Diseases	15,490	8.1%
6	Psychiatric Diseases	13,488	7.0%
7	Pulmonary Diseases	6,962	3.6%
8	Obstetric Checkup	5,737	3.0%
9	Cardiovascular Diseases	5,139	2.7%
10	Hematopoiesis and Immunology Diseases	5,091	2.6%
11	Others	20,964	10.9%
Total		192,154	100.0%

* On Health Statistics, it is described parasite diseases. However, MoH suggested to team that it should be infection diseases.

Source: Health Statistics 2008-2010, Statistical Agency of Kosovo

Parasite diseases are the most common diseases (according to their explanation, they regard the disease as an infectious diseases). This means that hygienic environment is still an issue. On the other hand, chronic diseases are increasing and a diseases pattern is shifting to a double structure. Furthermore, number of psychiatric diseases is high due to an effect of post conflict condition. Detailed activities of each health facility are attached. Table 22, statistics on the first level health facility analysis indicates that characters and tendencies of health care in Kosovo as follows:

Table 22 Statistics on the First Level Health Facility

Category/Year	2008	2009	2010
Patient number to First Level Health Facility	4,318,850	909,253	3,802,995
Number of doctor on First Level Health Facility	5,466	5,533	5,435
Population **	1,747,383	1,761,474	1,775,680
Population per one doctor	319	318	327

Source: Health Statistics 2008-2010, Statistical Agency of Kosovo

**http://databank.worldbank.org/data/views/reports/tableview.aspx

Overall patient number has decreased 11% from 2008 to 2010. It is thought that the reason for this decrease is that patients' preference shift from public to private medical facilities and/or increased use of health facilities in Macedonia due to the improvement of people's economic status. Also, some degree of improvement of the people's health status might be associated as

well. As for the number of doctors, since there is one doctor for 2,000-2,500 habitants, thus and average number of allocated doctors already matched to the MoH's guideline.

(2) Field Visits

Filed visits were made on two MFHCs. Activities and conditions of these two MFHCs are described in Table 23.

Table 23 Activity of the First Level Health Facility

Facility Name	MFMC Mitrovice	MFMC Gjacoba
Location	Mitrovice	Gjacoba
Function	Main center for 9 Family Health Center and 11 Ambulatoriums. Laboratory and physiological test is available only MFMC. Emergency patient and dental care available.	Main center for 10 Family Health Center and 16 Ambulatoriums. No laboratory and physiological test. Emergency patient and dental care available.
Staff Number	290 (Dr. 37, Ns. 200, Others 53)	355 (Dr. 123, Ns. 150, Others 82)
Doctor	Family Medicine (General Practitioner and Specialist)	Family Medicine (General Practitioners and Specialist)
Outpatient Number	630 patients per day (Including FMC, Ambulatoriums and emergency) OPD 7:30 - 14:00 Emergency 24 hrs.	1,090 patients per day (Including FMC, Ambulatoriums and emergency) OPD 7:30 - 14:00 Emergency 24 hrs.
Medical Activity	General Medicine, Anti and Post-natal Care, Neonate checkup, EPI, Home visit, Laboratory and Physiological test, Issue Prescription, Dental care, Emergency	General Medicine, Anti and Post-natal Care, Neonate checkup, EPI, Home visit, General Medicine, Anti and Post-natal Care, Neonate checkup, EPI, Home visit,
Equipment	General X-ray unit, Blood analyzer for hematology and biochemistry, Dental unit.	Dental unit
Mortality Number	6 (2013, Cardiac diseases)	-

Source: Answers of questionnaires, interviews, observational investigations

In Kosovo, primary level health facilities provide general primary health care and emergency services. MFMCs are allocated in each commune capital. FHCs and ambulatoriums are allocated at city and village levels, depending on their population of their coverage area. Usually doctors and nurses stay in FHC and these doctors regularly visit ambulatories for consultations. If a further clinical test is required, patients are referred to MFMCs or Regional Hospitals.

Emergency patients are to visit MFMC by themselves, or patients or their family should call an ambulance through emergency number. An ambulance is operated by MFMC and a doctor is on board. If MFMC doctors judged that the patient's condition is over MFMC's capacity, the patient will be transferred to a Regional Hospital. Basically, patients cannot visit Regional Hospitals by their decision.

A facility scale of Mitrovice MFMC seems to be sufficient as for MFMC. However, due to

obsolete equipment, there is difficulty to perform proper laboratory and physical tests. Gjacova MFMC is temporary facility which was built as an extension of FMC building in 2000. Thus, this MFMC scale is extremely small, so necessary testing equipment cannot be installed there. Former Gjacova MFMC had a problem of construction and its traffic location. Thus it was planned to construct new building, and a current existing facility is for temporarily usage. Even though a land has already obtained, construction budget has not yet secured. Requests of assistance to donors have been already made, but there is no positive answer from them so far. Under these circumstances, Gjacova MFMC is operating without laboratory and physical tests, so all these tests have to be requested from a Regional Hospital. In conclusion, infrastructures of both MFMCs need to be improved.

Table 24 Number of Outpatient (Emergency Patient Included)

Facility Name	2009	2010	2011	2012	2013
Mitrovice MFHC	198,605	159,803	208,899	209,688	231,115
Gjacova MFHC	410,285	435,486	433,497	400,242	400,127

Source: Answers of questionnaires

Table 25 Major Diseases (MFMC)

Facility Name	Major Diseases
Mitrovice MFMC	Cardiac Diabetes Pulmonary diseases, Infection diseases (Diarrhea and other digestive infection), Endocrine abnormality (Diabetes type I and II)
Gjacova MFHC	N/A

Source: Answers of questionnaires

· Physical test number

Table 26 Mitrovice MFMC Number of Performed Test

Test / Year	2009	2010	2011	2012	2013
X-ray	7,024	6,991	5,783	6,472	5,899
ECG	3,102	1,992	2,945	2,451	2,759
Laboratory examination	14,631	14,881	15,133	14,933	15,433

Source: Answers of questionnaires

Table 27 Gjacova Number of Performed Test

Test / Year	2009	2010	2011	2012	2013
Laboratory examination	11,362	14,136	19,769	15,879	17,748

Remarks: Due to limited space, Gjacova MFMC cannot perform X-ray test and ECG test, and provides only some laboratory examination, such as blood test and general tests.
Source: Answers of questionnaires

· Financial Condition

Only expenditure situations were answered and shown in Table 28 and 29. All budgets are allocated by commune. Budget situations are shown in the following Table 28 and Table 29 below. 70-80% of total expenditure is allocated for staff salaries in Mitrovice MFMC from 2009 to 2013. This percentage is understandable because the main activity at MFMC is almost consulting service of doctor in/outside of the health facility. However if we consider the fact that examination and medication services are performed as well at MFMC, the expenditure of those 2 services is very a small portion.

Table 28 Mitrovice MFMC

(Euro)

Expenditure / Year	2009	2010	2011	2012	2013
Salary for Staff	1,010,857	1,137,185	1,335,526	1,440,918	1,384,428
Medicine	32,956	41,577	39,238	53,068	46,431
Purchase of Equipment	17,572	31378	42,917	42758	10597.90
Maintenance of Equipment	16081	20,477	23,805	15,491	19,997.08
Reagent and Consumables	20,009	21,891	22,612	29,106	19,178
Others (including Capital Investment)	327,391	179,927	266,876	204,071	227,220
Total	1,424,866	1,432,435	1,730,976	1,785,412	1,707,852

Source: Answers of questionnaires

Table 29 Gjacova MFMC

(Euro)

Expenditure / Year	2009	2010	2011	2012	2013
Salaries	1,038,839.90	1,368,504.66	1,741,887.47	1,811,811.11	1,812,844.45

Remarks: In the case of Gjacova MFMC, a commune office controls expenditure except for salary.
Source: Answers of questionnaires

・Number of staff

Table 30　Staff number of Mitrovice MFMC and Gjacova MFMC

Category	Mitrovice MFMC	Gjacova MFMC
General Practitioner	20	75
Specialist (Family Medicine, Obstetrics and Gynecology and Pediatric etc.)	14	48
Pharmacist	1	-
Nurse	168	150
Assistant Nurse	-	40
Midwife	-	13
Laboratory Technician	14	7
Administration	-	10
Others	68	12
Total	285	355

Source: Answers of questionnaires

In principal, each family doctor should take responsibility for specific families and keep their lives healthy for a long period of time. In the case of Kosovo, however, this mechanism has not yet been well established. Doctors on MFMC provide medical services to various patients by sharing their medical records. One doctor is responsible for average 2,136 patients in Mitrovice and 775 patients in Gjoacova. Both areas clear the condition which MoH guideline defines, however the difference of these two areas is large.

The following problems are observed through the field survey of two MFMCs. It is expected that other MFMCs have also similar circumstances.

- Laboratory and/or physiological tests are not available due to obsolete equipment or limited space of MFMC facility.
- Number of doctors per population varies according to each area.
- Primary health care is managed by commune and its budgetary scale is presumed smaller compared to that of MoH. Thus the condition may be preventing sufficient budget allocation for investment and maintenance.

3.1.3　Current Situation of Secondary Level Health Facilities and existing Medical Equipment

(1) Analysis by Statistic Data

The number of doctors of secondly health facilities is radically increasing. Due to MoH's policy,

the capacity of university is also rapidly expanded to fulfill this condition. Even so, the number of in-patients, bed number, average length of stay, and a bed occupancy rate of 2010 has decreased from 2008. Investigation for this reason has not been conducted, but circumstances such as the following reasons might have been of effect;

- Inaccurate data
- Patients prefer to visit the tertiary level hospital instead of regional hospital due to limited function of regional hospitals
- A total population decrease or a partial population decrease in target areas (assessed by a comparison of the population census of 2001 and 2011)
- Increased visits of private hospital care and medical care in foreign country (especially Macedonia) derived from people's income increase (including foreign remittance).

Table 31 Major Indicator of Regional Hospital

Category / Year	2008	2009	2010
Inpatient (Number)	169,749	170,852	168,953
Doctor (Number)	1,067	963	1,997
Bed Number	3,994	3,764	3,899
Average Length of Stay (day)	4.9	4.8	4.0
Bed Occupancy Rate (%)	58.4	56.2	55.5

Source：Health Statistics 2008-2010, Statistical Agency of Kosovo

(2) Field Visits

An outline of the field visits survey of hospitals is summarized in Table 32. Detailed survey results of each hospital are analyzed after the outline as well. It is confirmed that provided services of each hospital have a variation.

Table 32 Secondary Level Health Facility

Facility Name	Mitrovice Regional Hospital	Gjacova Regional Hospital	Prizren Regional Hospital
Location	Mitrovice	Gjacova	Prizren
Function	Hospital care, emergency	Hospital care, emergency	Hospital care, emergency
Bed number	95	204	521
Staff	416	552	763
Inpatient	6,350	2,884	24,828
Operation room	6 (2 for general surgery, 2 for obstetrics/gynecology and 2 for others)	8 (4 for general surgery, 1 for ENT, 1 for ophthalmology and 1 for obstetrics/gynecology)	10(1 for general surgery, 1 for urology, 1 for orthopedic, 1 for emergency, 1 for ENT, 2 for gynecology and 1 for obstetric)
Department	Surgery, Anestheoloy / reanimation , Obstetrics / gynecology, Neonatology, Urology, ENT, Ophthalmology, Medical,	Surgery, Orthopedic, Urology, ENT, Ophthalmology, Obstetrics / gynecology, Neonatology, Pediatric, Internal,	Surgery, Anesthesia and reanimation, Obstetrics and gynecology, Neonatology, Urology, ENT, Ophthalmology, Internal,

	Neurology, Pulmorogy, Infection, Pediatric, Dermatology, Rehabilitation, Emergency, Pathology, Laboratory, Radiology, Blood bank	Infection, Neurology, Psychiatric, Chest surgery, Dermatology, ICU,CCU	Neurology, Pulmonary, Infection, Pediatric, Dermatology, Rehabilitation, Emergency, Pathology, Laboratory, Radiology, Blood bank
Equipment Condition	Radiology (MRI, CT, General X-ray, Endoscopy, Ultrasound diagnostic apparatus), Operation room equipment, ICU equipment etc.	Radiology (MRI, CT, General X-ray, Ultrasound diagnostic apparatus), Operation room equipment, ICU equipment etc.	Radiology (MRI, CT, General X-ray, Ultrasound diagnostic apparatus), Operation room equipment, ICU equipment etc.
Medical Equipment Maintenance Staff	3 (Exclusive for medical equipment)	5 (Responsible for medical equipment and facility)	20 (Responsible for medical equipment and facility)

Source: Answers of questionnaires, interviews, observational investigations

(a) Mitrovice Regional Hospital

Mitrovice Regional Hospital is located in the southern area of Mitrovice region which has an autonomous area of Serbian people. This facility was constructed by cooperation from Norway. Equipment has been procured by MoH. It has started full operation from 2012. Accordingly, facility and equipment conditions of this hospital are relatively new and appropriate. There are 95 beds in the hospital. These are internal medicine, a surgical, obstetrics and gynecology, and a pediatric department. Adding to them, there are also emergency, laboratory and physical test facilities (diagnostic imaging, blood test), and a pharmacy as well. There are 2 general surgical rooms, 2 obstetrics and gynecology rooms, and 2 other operation rooms. An average number of operations are 9 per day (2,235 cases in 2013/ 250 days= 8.9 cases per day). An average number of normal deliveries are 4 cases per day (1,567 cases in 2013/ 365 days= 4.3 cases per day). An average hospital stay was 4.2 days in 2013. The number of CT examinations is 4.0 cases per day (1,004 cases in 2013/ 250 days= 4.0 cases per day), and that of ultrasonography is 14.0 cases per day (3,494 cases in 2013/ 250 days= 14.0 cases per day). Beds occupancy rate is 76.4% in 2013. Details of hospital operation are shown on Table 33 - 37. Even though there is no change in bed number, inpatients, outpatients, a bed occupancy rate and operation number have significantly increased. This increase was thought to be realized by the dispatch of doctors from UCCK to cover the lack of surgical doctors of Regional Hospital as a temporary measure. Mortality rate also slightly decreased, so it is presumed that temporary regular visits by surgical doctors have been making a significant impact on hospital operations. Beds occupancy rate is closer to 80%, so it might be safe to say that it is a reasonable situation. Referred patients to UCCK of 2013 are 994 (cardio vascular, cranial nerve disease pediatric surgery and neonate patients).

Table 33 Activity on Mitrovice Regional Hospital

Activity / Year	2009	2010	2011	2012	2013
Bed Number	95	95	95	95	95
Hospitalized Patient Number	13,077	14,194	14,766	14,984	15,537
Outpatient	772	2,703	4,070	6,064	6,305
Bed Occupancy Rate （%）	-	36.6	51.6	71.7	76.4
Average Length of Stay (Day)	-	4.7	4.4	4.1	4.2
Annual Operation Number	58	854	1,388	1,339	2,235
Annual Delivery Number	714	1,225	1,383	1,495	1,567
Annual Death Rate (%)	-	0.85	1.54	1.15	1.31

Source: Answers of questionnaires

Table 34 Mitrovice Regional Hospital Major Diseases

Diseases (hospitalized patient)	Number	Diseases (Outpatient)	Number
Myocardia Infarct	280	Hernia	64
Appendix	157	Malignant Disease	44
Cholecystitis	98	Hypertension	428
ICV Syndrome	98	Tonsil and Pharyngitis	980
Internal Cerebral Vein Diseases	84	-	-

Source: Answers of questionnaires

Table 35 Mitrovice Regional Hospital Major Mortality Cause

No.	Diseases	Number
1	Carcinoma	17
2	Myocardia	9
3	ICV syndrome	8

Source: Answers of questionnaires

Table 36 Mitrovice Regional Hospital Examination Number

Examination / Year	2009	2010	2011	2012	2013
CT	-	605	1,372	1,311	1,004
X-ray	10,099	11,388	6,222	6,111	7,785
ECG	-	-	-	-	-
Ultrasonic Diagnosis	3,206	2,683	2,818	3,186	3,494
Endoscopy	-	-	-	-	83
Blood and Urine etc.	-	-	7,363	12,810	15,210

Source: Answers of questionnaires

Table 37　Mitrovice Regional Hospital Patient（Enter to Hospital, Year of 2013）

Category	Number
Home	3,034
Primary healthcare Facility	2,467
Police	36
Other Hospital	39
Private Hospital	176
Private Clinic	179
Office or Company	24
Others	18
Total	5,973

Source: Answers of questionnaires

The budget status and expenditure are shown in Table 38 and Table 39. All hospital revenue is comprised of the MoH budget and a small amount of medical fee from patients. In 2013, the ratio of salary was 70% and it is a major part of the expenditure. It means operations of the hospital are not flexible conditions in terms of finance. The situation of operations of the hospital seems to be difficult to manage the variable budget properly, such as budgets for pharmaceutical product, consumables, and maintenance, in addition to its absolute amount.

Table 38　Mitrovice Regional Hospital Revenue

(Euro)

Revenue category / Year	2009	2010	2011	2012	2013	Ration on 2013
Medical Fee	24,076	28,876	20,651	17,108	18,719	24,076

Source: Answers of questionnaires

A medical fee is the cost of administrative procedures of 1 Euro which patients have to pay on each visit. This medical fee is transferred to the Ministry of Finance directly so the hospital or MoH cannot use it by their initiatives. In addition to this revenue, there should be a budget from the Ministry of Health, but the data were not provided.

Table 39 Mitrovice Regional Hospital Expenditure (Euro, Rounding up less than 1 Euro)

Expenditure / Year	2009	2010	2011	2012	2013	Ration in the Budget of 2013
Salary	877,756	1,344,347	1,665,787	1,891,576	2,196,681	70.1%
Medicine	-	-	500,758	600,528	568,611	18.1%
Equipment	501,431	912.158	396,014	585,694	291,261	9.4%
Maintenance, Reagent, Consumable, Others	17,057	42,284	40,523	65,972	74,121	2.4%
Total	1,396,245	2,298,791	2,603,082	3,143,771	3,130,674	100.0%

Source: Answers of questionnaires

The number of staff and their average monthly salaries are shown in Table 40.

Table 40 Mitrovice Regional Hospital Staff and Average Monthly Salary

Category	Number	Average Monthly Salary (Euro)
Specialist	61	507.51
Pharmacist	3	290.00
Nurse	222	326.40
Midwife	24	327.18
Laboratory Technician	8	327.18
Medical Equipment Maintenance	3	435.27
Administration Staff	23	290.00
Others	72	241.67
Total	416	

Source: Answers of questionnaires

A staff number of 416 are significantly large for the bed number of 95. Resident doctors of this facility are not many, and there are many doctors who are dispatched from UCCK on a business trip basis. It is thought to be one reason that those doctors are also included into the calculation, thus the number of employees, especially the number of doctors seems to turn out to be abnormally large. There might be political reasons for having many other staff as well:

(b) Gjacova Regional Hospital

Gjacova Regional Hospital is located in boarder area with Albania. This hospital accepts patients

not only from Kosovo but also from Albania. There is a contract between Kosovo and Albanian MoHs. Patients from Albania can receive medical treatments based on the Albanian medical insurance system. Kosovo patients can obtain medical care only by an administrative fee as same as other areas. Their operation ward was constructed by Norway Corporation in 2000. Other facilities were constructed under the Yugoslavia period. Total bed number is 204. There are 4 general surgical rooms, 2 obstetrics and gynecology operational rooms, and 2 operation rooms for other purposes. On average, the number of operation is 8 per day, and a normal delivery is 4 cases per day. There is no MRI, and CT examination is 5 cases per day. There was equipment for ultrasonography but its operation number per day was not disclosed. This situation might suggest that various data on a regular basis have not been collected. An average length of stay is 5 days and it is a standard period. The bed occupancy rate, however, is over 100%. It looks the number of inpatient is controlled by the hospital. CT and some other equipment were replaced by MoH recently. However, there are many equipment (laboratory analyzer, General X-ray, ICU equip etc.) that are obsoleted and necessary to be replaced. Approximately 250 patients are referred to UCCK annually.

Table 41 Gjacova Regional Hospital Activity

Activity / Year	2009	2010	2011	2012	2013
Bed Number	204	204	204	204	204
Hospitalized Patient Number	16,979	17,220	16,542	16,266	16,603
Outpatient	93,092	94,278	99,741	98,166	99,389
Bed Occupancy Rate （%）	120.9%	115.6%	104.4%	102.7%	100.3%
Average Length of Stay (Day)	5.3	5.0	4.7	4.7	4.6
Annual Operation Number	2,479	2,797	2,687	2,761	2,884
Annual Delivery Number	1,562	1,655	1,596	1,575	1,589
Annual Death Rate (%)	1.01%	0.84%	0.98%	0.97%	0.88%

Source: Answers of questionnaires

Table 42 Gjacova Regional Hospital Test Number

Examination / Year	2009	2010	2011	2012	2013
CT	-	390	1,028	1,278	1,734
X-ray	11,781	11,368	10,558	9,070	11,533
ECG	12,389	15,804	16,846	16,260	19,235
Ultrasonic Diagnosis	-	-	-	-	-
Endoscopy	503	402	472	407	264
Blood and Urine etc.	28,061	31,257	27,640	21,106	21,253

Source: Answers of questionnaires

Their budgetary information was provided as in Table 43 and 44. Same as other hospitals, medical fees are all remitted to MoF and all operation budgets are allocated by MoH. However, only medical fee data was provided from the hospital. On expenditure, a percentage of salary is 61% and the ratio is high, thus it is presumed that the situation is difficult to operate, such as for the procurement of pharmaceutical products, due to the lack of financial flexibility. ,

Table 43 Gjacova Regional Hospital Revenue

(Euro)

Revenue / Year	2009	2010	2011	2012	2013
Medical Fee	24,076	28,876	20,651	17,108	18,719

Source: Answers of questionnaires

A medical fee is the cost of administrative procedures of 1 Euro which patients have to pay on each visit. This medical fee is transferred to the Ministry of Finance directly so the hospital or MoH cannot use it by their initiatives. In addition to this revenue, there should be a budget from the Ministry of Health, but the data were not provided.

Table 44 Gjacova Regional Hospital Expenditure (Euro, Under 1 Euro Omitted)

Expenditure / Year	2009	2010	2011	2012	2013	Ration in the Budget of 2013
Salary	1,631,420	2,188,846	2,902,209	3,229,390	2,945,421	61.7%
Medicine	603,960	540,758	532,754	659,466	841,349	17.6%
Investment	582,000	328,798	300,924	335,799	328,799	6.9%
Various Consumables	348,799	370,001	279,775	476,822	600,000	12.6%
Total	3,166,179	3,428,395	4,015,663	4,701,480	4,771,569 (Include 56,000 donation)	100.0%

Source: Answers of questionnaires

Number of staff is shown on Table 45.

Table 45 Gjacova Regional Hospital Staff Number

Staff	Number
General Practitioner	4
Specialist	82
Pharmacist	1
Nurse	336
Administration Staff	40
Others	90
Total	552

Source: Answers of questionnaires

(c) Prizren Regional Hospital

Prizren Regional Hospital is located in the second largest city of Kosovo. This city is a tourist area and many foreigners are visiting. Its neonate ward was renovated by Luxemburg assistance and sufficient number of medical equipment was installed. This year, Luxemburg is going to start new project which contains a health information system management components. The hardware for it has already installed in Prizren Hospital. On the other hand, many equipment of other departments (radiology including CT, ultrasound diagnostic apparatus, laboratory equipment, ICU equipment etc.) is already obsoleted and replacement is required.

Numbers of inpatients and operations are slightly increasing, but numbers of outpatient and delivery remain unchanged. A bed occupancy rate is low thus it may need to reconsider its hospital scale, and probably, the original setting of bed number was too many.

In addition, medical services that can be provided in the hospital are limited and have not been adjusted over the past five years. Therefore, many patients who are referred to UCCK are in need of advanced medical care such as neurosurgery, thoracic surgery, vascular surgery, cardiac surgery, and treatments for preterm infants.

Table 46 Prizren Regional Hospital Activity

Activity / Year	2009	2010	2011	2012	2013
Bed Number	521	521	521	521	521
Hospitalized Patient Number	13,077	14,194	14,766	14,984	15,537
Outpatient	25,177	25,165	25,000	24,985	24,828
Bed Occupancy Rate （%）	63.5%	70.0%	64.4%	60.4%	59.9%
Average Length of Stay (Day)	4.8	5.3	4.9	4.6	4.6
Annual Operation Number	5,057	5,287	5,138	5,346	5,419
Annual Delivery Number	4,332	4,293	4,409	4,388	4,203
Annual Death Rate (%)	0.01%	0.01%	0.01 %	0.01 %	0.01 %

Source: Answers of questionnaires

Table 47 Prizren Regional Hospital Major Diseases of Hospitalized Patient

No	Diseases Name	Number
1	Screening Test	5,321
2	Maternity, Delivery and Perinatal Diseases	4,785
3	Pulmonary Diseases	2,731
4	Gastrointestinal Diseases	2,371
5	Cardiovascular Diseases	2,297
6	Infection and Parasite Diseases	1,081
7	Injury and Poisoning	772
8	Urology Diseases	718
9	Eye and Adnexa Diseases	663
10	Others	571
11	Hematology Diseases	513

Source: Answers of questionnaires

Table 48 Prizren Regional Hospital Major Cause of Death

No.	Diseases Name	Number
1	Cardiovascular Diseases	236
2	Emergency (Traffic accident, Cardiac Diseases)	95
3	Tumor	37
4	Pulmonary Diseases	16
5	Other Abnormality	19
6	End Criminology and Abnormal Metabolism	10

Source: Answers of questionnaires

Table 49 Prizren Regional Hospital Test Number

Examination / Year	2009	2010	2011	2012	2013
CT	2,975	3,839	2,612	3,137	3,006
X-ray	22,633	20,848	17,381	17,559	17,222
ECG	8,491	7,143	6,946	8,23	7,771
Ultrasonic Diagnosis	16,108	17,814	24,126	20,617	15,694
Endoscopy	991	1010	962	1189	1528
Blood and Urine etc.	497,253	515,183	491,067	441,590	475,042

Source: Answers of questionnaires

Table 50 Referred Patient Number from Prizren Regional Hospital to the Tertiary Level Hospital

Year	2009	2010	2011	2012	2013
Referred Patients	462	449	497	536	443

Source: Answers of questionnaires

A percentage of salary is 56.5%, and although the ratio is lower than Mitrovice Regional Hospital, the flexibility for budget control within the hospital seems to be still limited. Detailed revenue data was not provided, but all budget of this facility is provided by MoH.

Table 51 Prizren Regional Hospital Expenditure (Euro)

Expenditure / Year	2009	2010	2011	2012	2013	Ratio in 2013
Salary	2,623,811	3,382,644	4,107,026	4,520,914	4,583,478	56.5%
Medicine	1,442,666	1,557,637	692,817	1,443,216	1,667,867	20.5%
Equipment	639,930	552,562	399,272	549,617	597,374	7.4%
Maintenance	61,660	52,246	49,121	72,243	198,264	2.4%
Reagent and Consumables	144,460	155,740	134,066	167,152	167,380	2.1%
Others	611,375	503,453	547,486	604,797	905,005	11.1%
Total	5,523,902	6,204,282	5,929,790	7,357,942	8,119,371	100.0%

Source: Answers of questionnaires

For a 521-bed hospital, it is slightly more staffing. It is, however, the staff allocation is more adequate compared to other hospitals in Kosovo, and thus its operation is also thought to be more appropriate.

Table 52 Prizren Regional Hospital Staff and Average Monthly Salary

Staff	Number	Average Monthly Salary (Euro)
Specialist	159	507.50
Pharmacist	1	507.50
Nurse	186	327.18
Assistant Nurse	187	290.00
Midwife	45	327.18
Laboratory Technician	44	327.18
Medical Equipment Maintenance	5	435.01
Administration Staff	38	290.00
Others	98	241.67
Total	763	

Source: Answers of questionnaires

Based on this field visit, the following conditions are presumed as for a character of Regional Hospital and its necessity to strengthen their management and infrastructures.

- Bed occupancy rates are not appropriate. Depends on hospitals, the rate is either low or high.
- Upgrading and Introduction of medical facilities are not sufficient, thus this condition might restrict proper medical service provision.
- Conditions and operational situations of hospitals vary, thus it is necessary to devise plans according to each facilities.

3.1.4 Activities of Tertiary Level Health Facility (UCCK) and the Condition of its existing Medical Equipment

(1) Analysis by Statistic Data

The tertiary level health facility of Kosovo is only UCCK in Prishtina. It is also functioning as a secondary level health facility because there is no Regional Hospital in Prishtina. UCCK has a function of a teaching hospital as well as a university. In this facility, as a separate organization, a Dental University Hospital, which is a tertiary facility of dental care, is also located here.

Table 53 Outline of UCCK

Facility Name	UCCK
Location	Prishtina
Bed Number	1,972 Beds (Health Statistics 2010, Statistical Agency of Kosovo)
Department	32 Departments (some of them are separated building) and 6 Supporting Departments (Radiology, Laboratory, Pathology, Anatomy etc.)

Staff	Approx. 3,000
Dr.	Approx. 700
Hospitalized Patients	Approx. 90,000 Patient / Year
Activity	Third Level Care and Second Level Care of Prishtina City
Equipment	Angiography 1, MRI 1, CT 2 etc. Equipment in this facility is fulfilled. However, some equipment necessary to be replaced or added.
Medical Equipment Maintenance	5 Medical Equipment maintenance technicians are allocated. Complicated equipment is contracted for outsourcing.

Source: Answers of questionnaires, interviews, observational investigations

(2) Field Visits

UCCK is the largest health facility in Kosovo with 1,972 beds. Answers to our questionnaire were not provided, thus analysis was made by field visits and published data on hospital web pages. A total patient of UCCK is almost the same as a total patient of all Regional Hospital. This condition means patients are concentrated in UCCK. Activities of some departments are confirmed to be high. On a pediatric department, a bed occupancy rate is more than 100% and it is presumed to be very crowded. Radiology activities are also presumed to be close to the limit of the day for the equipment usage of MRI, CT, ultrasonography etc.

Staff number of 4,216 is also significantly large for a 1,972 beds-hospital. This is because the staff of the university is working as both a clinical staff and a teacher in this hospital. Aside from such staff, and in addition to patients, there are many staff such as resident doctors, medical students, nursing students who are on practice and training, thus the hospital is very crowded.

In this hospital, various facilities are connected internally to operate, so outside walk is usually not required. Patients can visit each department for testing.

The radiology department and ICU are well equipped and operated frequently, thus utilization of their equipment is overloaded, but it was fully operational. Thanks to the budget from MoH and donors, even it is still limited, some improvements of the facility and replacement of medical equipment seemed to be implemented on UCCK. It was, however, explained that sufficient improvements are not covering whole departments and further improvement would be required for other departments. For instance, the pediatric surgery (the department has not yet been established), the orthopedic and endoscopy centers (the centers have not yet been established) are in need of further improvement of their equipment and facilities, and if they are strengthened, the hospital will be able to increase its service provision. Currently, the capacity of these medical fields is lacking in all parts of Kosovo.

Table 54 Major Indicator of UCCK in Last Three Years

Category / Year	2008	2009	2010
Hospitalized Patient Number	87,399	87,489	84,991
Annual Operation Number	14,069	14,069	25,978
Doctor	600	553	870
Bed Number	2,094	1,829	1,972
Average Length of Stay (Day)	5.7	5.7	5.9
Bed Occupancy Rate （%）	65.1%	74.5%	70.1%

Source: Health Statistics 2008-2010, Statistical Agency of Kosovo

Table 55 UCCK Staff (2013 First Half Year)

No.	Category	Number
1	Director	1
2	Deputy Director	1
3	Nursing Director	32
4	Head Nurse	141
5	Nurse	930
6	Infection Control	4
7	Midwife	196
8	Pediatric Nurse	170
9	Laboratory Technician	106
10	X-ray Technician	43
11	Pharmacist	24
12	Nurse (in service training)	9
13	Physiotherapist	24
15	Assistant	102
16	Technical Staff	19
17	Others	7
Total		1,809

No.	Supporting Staff	Number
1	Administration	154
2	Technical Service	182
3	Food Service	125
4	Fire Extinguish	12
5	Orthopedic Center	18
6	Maintenance	17
Total		508

Source: Raporti i punës gjashtëmujori i parë 2013, UCCK

Table 56 Staff Belong to University

No.	Category	Number
1	Doctor	556
2	Nurse	1,809
3	Administration Staff	28
4	Teaching Assistant	14
Total		2,407

Source: Raporti i punës gjashtëmujori i parë 2013, UCCK

Table 57 UCCK Procurement of Medicine and Consumables

(Euro)

Month	Procurement Amount	Percentage of Total Procurement Amount
1	105,709.16	General Medicine 39%
2	98,506.56	Cytostatic Agent 31%
3	93,687.60	Consumables 25%
4	160,963.86	
5	128,843.17	
6	144,284.90	
Total	731,995.25	

Source: Raporti i punës gjashtëmujori i parë 2013, UCCK
(Data is available up to June 2013)

Table 58 UCCK Department on Statistic Data

No	Department	No	Department	No	Department
1	Emergency	11	Ophthalmology	21	ENT
2	Surgery	12	Obstetrics and Gynecology	22	Psychiatric
3	Orthopedic	13	Oncology	23	Nephrology
4	Outpatient	14	Anestheology	24	Pulmonology
5	Neurology	15	Radiology	25	Oral surgery
6	Dermatology	16	Neonatology	26	Urology
7	Gastrointestinal	17	Orthopedic center		
8	Infection	18	Pediatric		
9	Rehabilitation	19	Radiotherapy		
10	Cardiovascular	20	Rheumatism		

Source: Raporti i punës gjashtëmujori i parë 2013, UCCK

(3) Activities of Each Department

・Radiology

Table 59 Staff of Radiology

Category	Number
Radiology specialist	25
Nurse	25

Source: Raporti i punës gjashtëmujori i parë 2013, UCCK

Table 60 Number of Tests of Radiology

Test Item	2013 First half Year	Average Patient per Day
Ultrasound Diagnosis	4,724	26
MRI	2,323	13
CT	5,440	30
General X-ray	44,451	247

Source: Raporti i punës gjashtëmujori i parë 2013, UCCK

The number of staff and equipment (MRT 1 set and CT 2 sets) condition are indicating that their working situation is near overloaded.

·Activities of Diagnosis and Treatment Departments

Table 61 Staff Number on Major Department

Category	Surgery	Orthopedic	Cardiovascular	Pediatric
Specialist	68	-	26	40
Nurse	145	-	57	134
Others				42

Source: Raporti i punës gjashtëmujori i parë 2013, UCCK

Table 62 Health Statistics at UCCK

Category	Surgery	Orthopedic	Cardiovascular*	Pediatric
Bed Number	282	102	61	151
Hospitalized Patient Number	2,487	873	800	3,025
Outpatient				9,847
Bed Occupancy Rate （%）	787	540	-	-
Average Length of Stay (day)	7.2	13.2	5.2	9.8
Annual Operation Number	80.9%	62.6%	76.2%	109.5%
Annual Delivery Number	45	0	34	18
Annual Death Rate (%)	1.8%	0%	4.3%	0.6%

*Remark: Only second quarter

Source: Raporti i punës gjashtëmujori i parë 2013, UCCK

Table 63 Number of Performed Tests

Test Category	Surgery	Orthopedic	Cardiovascular*	Pediatric
Ultras Onography (Abdomen)	206	1,755	-	2,169
Ultrasonography (Cardiac)	-	-	2,280	522
Ultrasonography (Doppler)	-	-	804	-
Ultrasonography (Cranial)	-	-	-	341
Gastrendoscopy	255	-	-	-
Colonoendoscopy	51	-	-	-
Anoscope Test	59	-	-	-
ERCP	120	-	-	-
Biopsy	75	-	-	-
Polipectomy	3	-	-	-
Bronchosocpy	41	-	-	-
ECG, EEG, EMG etc.	258	455	7,029	520
Others	0	920	435	13

*Remark: Only second quarter

Source: Raporti i punës gjashtëmujori i parë 2013, UCCK

Table 64 Major Diseases

Department	Major Diseases
Surgery	Cystic, Hernia, Mammary Amputation, Biopsy, Cut-down etc.
Orthopedic	Bone fracture, Removal of Foreign body, Congenital Abnormality, Tumor etc.
Cardiovascular	Acute Myocardial Infarction, Coronary Artery diseases, Hypertension, Cardiomyopathy, Diabetes Type II etc.
Pediatric	Pneumonia, Bronchitis, Anemia, Febrile Convulsion, EPI etc.

Source: Raporti i punës gjashtëmujori i parë 2013, UCCK

3.1.5 Maintenance for Health Facility and Medical Equipment

At first level health facility, there is medical equipment which requires maintenance service just in MFMC. The responsibility of equipment maintenance is each municipality and MFMC. Since no engineer is allocated for equipment maintenance, it is required to have an own maintenance contract with a medical equipment agency or outsourced engineer.

To the second and tertiary level health facilities, maintenance technicians are allocated, and maintenance is conducted by these technicians on facility bases. MoH has no specialized department or person that can coordinate maintenance, so each health facility is responsible for those related activities. Only for large scale equipment, like CT and/or angiography, they are

subcontracted distributors or manufacturers of the equipment for maintenance.

There is no training institute for medical equipment technicians and engineers in Kosovo. From 2002, 14 technicians who are working in Kosovo had obtained a 2 year medical equipment maintenance training in Kosovo through the cooperation of SIDA. At the time of training, there were 20 technicians; however 6 technicians left their positions and only 14 are remaining now. With another 10 technicians who were hired by each facility, they are allocated nationwide. These 10 technicians are the personnel who have knowledge of electronics and were trained by OJT. Allocation of medical equipment technicians is shown in Table 65. Medical equipment technicians of UCCK maintain medical equipment only, but in some facilities, medical equipment technicians are also responsible for other equipment (i.e. Electrical, air conditioning, water supply, drain etc.). Organizational training was not conducted to them, so they are in need of trainings to deal with the latest and advanced technology of medical equipment. When the study team had interviews with each technician, there were strong demands for a capacity-building training.

Table 65 Allocation of Medical Equipment Maintenance in Regional Hospitals

Region	Number	Region	Number
Mitrovice	3	Prizren	5
Prishtina	4	Gjilan	2
Peja	4	Ferzaj	1
Gjacova	5	計	24

Source: Interviews

3.1.6 Private Hospitals

In Kosovo, there are various private clinics and hospitals in Pristina region. Some of these hospitals have an inpatient facility. The target population is patients in a wealthy class and foreigners who can afford its high medical charges. On the other hand, by being affiliated with the Ministry of Health, private hospitals have a complement function of supporting medical care to public hospitals which have limited capacity. Cardiovascular and/or neurosurgical patients are referred to private hospitals from public hospitals for operations. And also, private hospitals dispatch highly trained doctors to public hospitals for surgery operation assistances. Situation of the following two private hospitals were observed by field visits.

(1) Medical Hospital

Medical Hospital is a specialized hospital for cardiovascular diseases and was established in 2010 by Turkish hospital group which has a medical college in Turkey. Beginning of 2014,

departments of general surgery, orthopedic, ENT and ophthalmology started their operations. The hospital is aiming at expanding its operation and eventually becoming a general hospital. There is 113 staff, and 17 of them are medical doctors. Senior doctors are Turkish only. There are 2 operation rooms and 52 beds (14 rooms for 1 bed and 19 rooms for 2 beds). So far 5,000 of internal medicine patients and 447 surgical patients were treated in this hospital.

The hospital does not accept pediatric cardiovascular patients, even though it does accepts adult cardiovascular patients. As for angiography equipment, they are using Japanese products (Shimadzu Cooperation). Their charge for tests/operations ranges between 1,000-1,500 Euros for PTCA, 2,000-2,500 Euros for PCI and 5,000-10,000 Euros for heart surgery. Patients of around 85% pay medical charge from out of pocket. Approximately 10% is referred patients from public hospitals (medical charge is to be paid by the Government) and remaining 5% patients are covered by private medical insurance companies. This hospital has contracts with 5 private medical insurance companies. The hospital was keeping its cleanness and there were a lot of patients when the survey team visited.

(2) Clinic of Surgical ALOKA

Clinic of Surgical ALOKA was established in 2008 as a general surgical and vascular surgical hospital, and is providing advanced medical care of vascular surgery. The hospital is owned by a Kosovo citizen, and there are 8 surgeons and 30 nurses. It has 2 operation rooms working on 16 - 18 operation per month. Bed number is 15. There is a digital mammography, CT (64 slice), MRT (1.5T), general X-ray and ultrasound diagnostic apparatus. They manage each image by connecting with PACS (Medical Image Management System). Currently, an orthopedic unit is under construction, and there is plan to establish an obstetrics and gynecology unit in the future. In Kosovo, doctors are permitted to work both for private sector and public sector by law. Also, some doctors are giving lectures in universities. Examination cost is CT 125 Euro for abdomen contrast, 230 Euro for abdomen contrast MRI, and 450 Euro for appendectomy. They accept 50% discount on examination depending on the patients' economic status. The facility environment was clean, but the survey team did not see many patients when they visited.

3.1.7 Medical Infrastructure in Accordance with EU Standards

Currently, Kosovo is preparing a variety of laws and standards to join the EU. There are many laws and standards which need to be adjusted in accordance with the EU standards among them. Development of laws is almost completed in health sector, and actual operation shall be performed after the amendment of variety of detailed provisions to be matched these laws.

Generally, in European region countries, CE mark is an essential condition to obtain import permission, but obtaining CE mark is usually difficult for middle and small Japanese manufacturers. Kosovo Medicine Agency is the only institute under the umbrella of MoH which

can make the inspection and licensing of import drugs and medical equipment in Kosovo. Currently, the institute is performing a modification of the import permit provisions for pharmaceutical products and medical equipment based on the new law. Requirements for obtaining the CE mark are not specifically defined in the law of Kosovo now. The import of pharmaceuticals and medical equipment will be allowed in the new law, if products have obtained a recognized internationally recognized standard, such as ISO, FDA or JIS, and specified it on an import permit. Kosovo Medicine Agency explained that there is no plan to modify this procedure and construction in the near future, but it is required to confirm the latest import provisions which will be finalized from now on. Currently, it is necessary to obtain an import permit each time when importing pharmaceuticals and medical equipment, but a registration system is being planned for to be adopted. It is required for importers who participate in a bidding to register the Public Procurement Regulatory Commission (KRPP) that manages all public biddings. Currently, there are 200 companies in the fields of pharmaceuticals and medical equipment, and only about 30 companies in the field of medical equipment are registered with KRPP. The list of registered companies was not provided although the survey team requested.

3.1.8 Trends in the Private Sector

There is no single Japanese company doing business on health sector in Kosovo. Only a Real Estate Development Company and Japan Tobacco Inc. have established subsidiaries and operation in Kosovo. Some of Japanese medical device manufacturers are selling products and providing related services by setting their agencies in Kosovo or neighboring countries. Since these agencies have become jurisdictions of local subsidiaries of Europe manufacturers, in many cases Japanese medical device manufactures cannot grasp full information of the field. Medical device manufacturers of Europe also set up their agencies and work actively in Kosovo.

3.1.9 Development Status of Related Infrastructure

In urban areas, electricity supply, water supply and drainage system are in place. Power failures and voltage fluctuations used to occur frequently in the past, but nowadays the situation has relatively improved. Nevertheless, power failures have occurred at irregular intervals and water supply system is still unstable sometimes, thus it is necessary to pay attention to these conditions.

3.2 Analysis of Priority Ranking of Medical Infrastructure Based on the Survey Results

(1) Secondary Health Care Facilities

For secondary hospitals, there are different needs of medical infrastructure in each hospital. There are some hospitals rehabilitated recently through support of international donors and NGOs. For

instance, Mitrovice Regional Hospital was newly opened, and Prizren Regional Hospital was partially renovated. Therefore it is required to investigate the priority of rehabilitation for each Regional Hospital.

According to this survey, it was observed that there is a great need for procurement of medical equipment rather than facility rehabilitation for Regional Hospitals. Medical devises are to be updated because of the following reasons:

-The devices have become superannuated.
-The devices types are too old to provide the medical care service efficiently.
-The devices were initially lacking even though they were necessary to provide essential medical services.

It is still necessary to investigate facilities individually for different circumstances of each hospital.

There are 10 target second level hospitals which consist of Regional Hospitals and City Hospitals. Since Mitrovice Regional Hospital was newly opened, a necessity of support is low neither for facilities nor equipment. On the other hand, medical devices of Gjacova and Prizren Regional Hospitals need to be renewed. The information about hospitals in Serbian area is limited and it is difficult for MoH to investigate and evaluate a current status of medical equipment in those hospitals.

Table 66 High Priority Equipment for Secondary Health Facility

Department	Equipment name	Q'ty
Radiology	MRI	1
	CT	1
	General X-ray	1
	Fluoroscopy	1
	CR Unit	1
	Laser Imager	1
	IP Plate	6
	PACS	1
	Ultrasound Diagnostic Apparatus (Abdomen and Obstetric)	1 1
	Ultrasound Diagnostic Apparatus (Cardiac) etc.	
Endoscopy	Video Gastroscope	2
	Video Colonoscope	2
	Video Bronchoscope	1
	Camera Unit	2
	Endoscope Washer etc.	2
Laboratory	Hematology Analyzer	1
	Biochemical Analyzer (Automatic and Manual)	1
	Electrolyte Analyzer	1
	Immunology Analyzer	1
	Hormone Analyzer	1
	Centrifuge	1
	Pipette Set	4
	Laboratory Refrigerator	1 2

	Blood Refrigerator Freezer for Plasma etc.	1
Operation room (Case of 3 Operation Rooms)	Operation light Operation table Electrosurgical unit Patient monitor Anesthesia Defibrillator Suction unit Instruments trolley etc.	3 3 3 3 3 1 3 3
ICU (Case of 5 beds)	Patient monitor Suction unit Ventilator ICU bed Infusion pump Syringe pump ECG etc.	5 5 5 5 5 5 1
Emergency	ECG Patient monitor Defibrillator Oxygen inhalation set Resuscitator etc.	1 1 1 1 1

(2) Primary Health Care Facilities

Regarding to primary health care facilities, there is a preferential need for facility rehabilitation and renewal of medical equipment for 38 MFMCs, many FHCs and HCs, and outpatient clinics under MFMCs.

The medical equipment list of Table 66 indicates equipment of high priority which to be installed in MFMC, based on the analysis of existing medical equipment and laboratory examination that should be provided to MFMCs. Those medical devises are to be installed based on the following reason;

-The devices have become superannuated.
-The devices types are too old to provide the medical care service efficiently.
-The devices were initially lacking even though they were necessary to provide essential medical services.

From survey results of two MFMCs of this time, it was observed that some facilities need to be reformed. It is required to investigate each MFMC in order to choose target facilities and to design the details of medical equipment which should be procured for MFMC because each MFMC has a different condition. What we have currently confirmed at least is that the necessity of relocation of Gjacova MFMC. Since Gjacova MFMC has not been rehabilitated for long time because of insufficient budget, it is not fully functioning. The municipality has a responsibility for health capital investment, so it is presumed that a sufficient budget has not been allocated for PHC rehabilitation.

38 facilities shall be candidates as target facilities to be supported. Three facilities among them

are situated in Serbian residential areas and the areas are difficult to access for Kosovo MoH.

Table 67 MFMC High Priority Equipment

Department	Equipment Name	Q'ty
Radiology	General X-ray	1
	Fluoroscopy	1
	CR Unit	1
	Laser Imager	1
	IP Plate	6
	Ultrasound Diagnostic Apparatus (Abdomen and Obstetric) etc.	1
Endoscopy	Video Gastroscope	1
	Video Colonoscope	1
	Camera Unit	1
	Endoscope Washer etc.	1
Laboratory	Hematology Analyzer	1
	Biochemical Analyzer (Automatic and Manual)	1
	Electrolyte Analyzer	1
	Centrifuge	1
	Pipette Set	1
	Laboratory Refrigerator etc.	1
Dental	Dental Unit	1
	Autoclave	1
	Instruments Set etc.	1
Emergency	ECG	1
	Patient Monitor	1
	Oxygen Inhalation Set	1
	Resuscitator etc.	1

(3) Tertiary Care Facility

For a tertiary care facility, a budget allocation has been made relatively appropriately, in addition to rehabilitation efforts for facilities and medical equipment by the budget of the Ministry of Health and supports from donors. However, it does not cover entire hospitals and it was confirmed that there are situations in which maintenance of medical equipment is not keeping up with the demand, and there is a need for a medical device update depending on departments.

There are three departments that have been struggling to provide medical services to rural areas and have not been supported by MoH and donors. In accordance with the strengthening of these departments, the strengthening of diagnostic imaging departments would be also required. Totally 4 departments of pediatric surgery, orthopedic surgery, radiology, and endoscopic diagnosis section are in high need of assistance. Based on the rapid survey result by information collection and field visits, the medical equipment listed in Table 68 is to be upgraded for a tertiary level hospital.

Table 68　UCCK High Priority Equipment

Department	Equipment name	Q'ty
Pediatric surgery , Operation room (Case of 3 operation rooms)	Operation light	3
	Operation table	3
	Electrosurgical unit	3
	Patient monitor	3
	Anesthesia	3
	Defibrillator	3
	Suction unit	1
	Instruments trolley	1
	Urethoroscope, ridged	1
	Camera unit　　etc.	1
Pediatric surgery, ICU (Case of 5 beds)	Patient monitor	5
	Suction unit	5
	Ventilator	5
	ICU bed	5
	Infusion pump	5
	Syringe pump	5
	ECG　　etc.	1
Radiology	MRI	1
	CT	1
	General X-ray	1
	Fluoroscopy	1
	CR unit	1
	Laser imager	1
	IP plate	8
	PACS	1
	Ultrasound diagnostic apparatus (cardiac)	1
Orthopedic, Operation room (Case of 4 rooms)	Operation light	3
	Operation table	2
	Operation table, orthopedic	1
	Electrosurgical unit	3
	Patient monitor	3
	Anesthesia	3
	Defibrillator	3
	Suction unit	1
	Instruments trolley　　etc.	1
Orthopedic、ICU (Case of 5 beds)	Patient monitor	5
	Suction unit	5
	Ventilator	5
	ICU bed	5
	Infusion pump	5
	Syringe pump	5
	ECG　　etc.	1
Endoscopy center	Video gastroscope	4
	Video gastrosocpe, pediatric	1
	Video colonoscope	4
	Video bronchoscope	2
	Camera unit	10
	Endoscopy washer　　etc.	5

Chapter 4

Chapter 4 Issues and Recommendation for Possible Development Projects

4.1 Current situation in the Health Sector and Issues

(1) Changes in the Disease Structure

For both male and female, disease of the circulatory system was almost two thirds of the cause of death in Kosovo. The second leading cause of death is a tumor, and the first and second leading causes are both on the rise in recent years. Especially, the seventh leading cause of death of men, traffic accidents and suicide, has been increasing sharply 4 times from 2006 to 2011. From the above, diseases require an early diagnosis and treatments, diseases with rapid symptoms change, and diseases require preventive measure, tend to increase recently, In accordance with the transformation of the disease, medical activities with advanced medical technology, strengthening of medical services for emergency response, and preventive measure will be required.

(2) Patient Concentralization at the Tertiary Health Care Facility (UCCK)

The biggest concern of the health sector in Kosovo is that Patients tend to concentrate at UCCK, the only tertiary health care facility in the country. Such phenomenon occurs based on the patients' notion that more advanced facilities and equipment as well as higher competent doctors is available at UCCK. As a result, the patients believe that they will be able to receive higher level of treatment, and prefer to visit the tertiary health care facility from the first contact (without knowing the actual necessity of having advanced treatments). Challenges involved centralization of patients into tertiary health care facility is as follows:

a) Vulnerability of the function of secondary health care facilities

Lifestyle-related diseases, such as tumor, cerebrovascular and heart disease, and severe trauma due to traffic accidents have been increasing recently and both require early diagnosis and treatment. Therefore, the development of medical facilities and equipment, strengthening of the transport system of patients, and capacity building of medical personnel who are working at the secondary health care facilities are all necessary for patients to receive proper treatments at the level of secondary health care facilities, without visiting a tertiary health care facility. It is also necessary to develop infrastructures and equipment of secondary health care facilities (10 regional hospitals) which are located throughout the country as well as publicity activity to disseminate the information of results of these activities.

b) Vulnerability of the function of primary health care facilities and limited preventive sensitization activities

In order to expand the activities to reduce the mortality and morbidity of the lifestyle-related diseases, such as a tumor or cardiovascular disease, which are accounts for significant mortality factors, the functions of Main Family Medicine Center (MFMC) and Family Health Centers (FMC) also need to be improved. Upgrading of existing aging equipment in primary health care facilities is required in combination with the introduction of campaigns and activities of public relations to disseminate preventive measures to encourage the transformation of diet and lifestyle, and the capacity building of health care workers responsible for the public health of local residents.

The Survey Team visited three regional hospitals (Mitrovice, Gjakova, and Prizren) and two MFMCs. Mitrovice Regional Hospital is located at the north rural area where a large number of Serbs reside, so the access to this facility was very difficult for Albanians who reside in southern region. Thus a regional hospital with 100 beds has just been established in the southern region (the hospital opened in 2014 by expanding and repairing an existing small-scale medical facility). Therefore, the need of further development of medical facilities and equipment in this hospital was not confirmed. However, for regional hospitals of Gjakova and Prizren, the need of aging equipment's upgrade was confirmed, because equipment of these facilities has not been updated since 2000 when conflicts ended. Promoting the upgrade of medical equipment is also important in order to meet European standards.

On the other hand, it is also confirmed that medical equipment of MFMCs, which are to be a bridge between primary and secondary medical facilities has been aging. The sampling survey also confirmed that some basic diagnostic equipment required for MFMCs, such as X-ray machine and electrocardiograph, are sometimes lacking. According to the description of the Ministry of Health, the issue of aging of existing medical equipment was not only for sampling survey facilities and it is also common for many other facilities as well.

The number of outpatient is increasing in Mitrovice MFMC, and then it is slightly decreasing in Gjacoba MFMC. The number of examination of X-ray machine and electrocardiograph is decreasing in Mitrovice MFMC because it is easy to break down due to deterioration of equipment; On the other hand, the number of examination by laboratory equipment whose condition is well is increasing.

c) Aging Medical Equipment and Inadequate Medical Equipment for Advanced Medical Care in Tertiary Health Care Facilities

In the UCCK, responsible for tertiary health services, there are several developments which cannot provide required medical services due to the lack of adequate medical equipment, although health care workers with sufficient competency are working there. Particularly, at

the pediatric surgery department, the orthopedic surgery department, gastroenterology department (endoscope), and the medical services department using diagnostic imaging tests, activities of equipment are insufficient. Therefore, although the number is slight low, some patients who are in need of further medical services have been transferred to private hospitals or neighboring countries, including Macedonia. It is required that UCCK recovers to function as tertiary hospital with advanced treatment and medical technology by having priority to upgrade aging equipment of regional hospitals and MFMC at first for enhancement of function as health facility. Therefore UCCK can play an original role as tertiary hospital for the patient who needs the specialized and high medical care service.

Having the present situation as above, the needs of upgrading aging equipment of regional hospitals is tremendous. When promoting the development of equipment MFMC, however, it is crucial to assess the validity on the basis of further investigation and to lead to effective project formulation. In addition, since UCCK is the top referral hospital as the only tertiary health care facility in the national system, it is expected to decrease the number of patients who are transferred to other countries and to upgrade the level of domestic medical system by implementing equipment development to strengthen medical technology.

4.2 Contents of Possible Assistances and Suggestion

As a high-priority project, although the very limited medical facility infrastructure development for UCCK, the only tertiary level care medical services in Kosovo, and for some Regional Hospitals responsible for secondary health care services, have been implemented to strengthen the facilities and equipment, the support for majority of other regional hospitals and main family health centers (MFHCs) responsible for primary health care services have remained intact until today. The health sector strategy (2010-2014) aims at developing about half of existing medical facilities in 2014, but according to interviews from the Ministry of Health, the progress of project implementation was delayed and remained merely at the level of 30-35 % completion in some parts of UCCK, Mitrovice Regional Hospital, and Prizren Region Hospital. Existing equipment had been introduced into primary and secondary level health care facilities in early 2000 when the conflict ended, but now they are in need of being upgraded.

First, in order to alleviate the bypass phenomenon to UCCK, the development of regional hospitals needs to be carried out in combination with the improvement of the service system by strengthening the management structure and equipment maintenance. In order to build an appropriate system that can respond to the transformation of the disease structure, and to reduce the number of deaths from diseases, enhancement of secondary health care facilities is essential.

Next is the development of MFMC. A general radiographic X-ray equipment and electrocardiograph are ageing so their operation rate (i.e. the number of examinations, etc.) is decreasing. According to the interviews with MoH and staff of health facilities, such aging equipment has been seen in many facilities where that the Survey Team could not visit and inspect in this Study, so needs of upgrading exist. As part of preventive care services, chest examinations by plain X-ray imaging and electrocardiogram examination with electrocardiograph is very important. Thus support for these machines may contribute to the early detection of tumor and disease.

Finally, needs of support also exist in UCCK. If further treatment was difficult even at UCCK, which is responsible for tertiary health care services, medical expenses will surge because the patient need to be referred to private hospitals, or to be transported to neighboring countries. Thus if possible, it will be ideal to provide advanced medical services within UCCK. Therefore although the priority is not high, the needs of capacity development to provide advanced medical services exist there, since UCCK has accommodated certain number of competent health workers.

It should be noted that "Health Sector Strategy 2010-2014" of Kosovo aims at "Improving the quality of health services and expanding medical resources" and "Management and reorganization of existing medical facilities and adaption to European standards for procurement of medical equipment", thus the projected support contents can be regarded as consistent with the policy of the Kosovo government. In respect of development of equipment, it enable us for Japan to take advantage of our knowledge and technology to promote the technical assistance and effective use of medical resources and it will be also able to support the human resources development promoted by the Kosovo government. Therefore there are great needs of support for it and this approach is also consistent with the Japanese aid policy for Kosovo.

(1) The Maintenance of Medical Equipment

According to the results of sampling survey of regional hospitals and MFMCs, and interviews with Ministry of Health, it is determined that the highest priority is to upgrade existing aging equipment in the secondary health care facilities, followed by primary medical facilities.

Although the priority would be lower than primary and secondary health care facilities, assistances for imaging diagnostic technology, the departments of pediatric surgery and orthopedic surgery, and other equipment associated with specialized medical services such as an endoscope would still be required. At the moment, certain equipment, which is necessary to meet the medical needs, is not in place, and some other equipment in operation are in need of being updated.

The main equipment which is considered having a maintenance need in this survey is shown in the tables below. The reason to prioritize the support for Main Family Health Centers and Regional Hospitals is to strengthen the balanced medical referral system from the primary to tertiary care facilities by resolving the bypass phenomenon to UCCK, and by expressing a synergistic effect of the superiority of the family doctor system.

Main Family Health Center (MFHC):

Basically there is one MFHC in 1 municipality (City / Town). At present, there are 38 municipalities. However, the latest statistical data was published in 2010, and the number of municipality was 30 at that time. Thus the number of facilities was also 30. In the data, since the activity records of four facilities among them are not provided, 26 facilities are eventually counted as the target facilities.

Regional Hospital:

There are 10 Regional Hospitals nationwide, but in view of the scale of facilities and services, four hospitals are selected as high priority facilities. It should be noted that Mitrovice Regional Hospital was excluded from the list because the hospital was re-opened after its renovation in 2014. The target four hospitals are Gjilan, Gjakove, Peja, and Prizren Regional Hospitals. (See Table 69)

(2) Capacity Building in Technical Field

1) Improvement of Hospital Management

The director of department for European integration and policy coordination, Mr. Mentor SADIKU, has participated 5-S-KAIZEN-TQM training which was implemented by JICA and confirmed that it is one of the useful methods for improvement of hospital management in Kosovo. Regional hospitals need to change the current management structure, because they need to operate their facilities more efficiently, to disseminate information to residents from their facilities, and to introduce new management system to establish service lines according to each diagnosis and treatment department, in addition to the need of upgrading medical facilities' infrastructures and equipment. Since the implementation of 5-S-KAIZEN-TQM can be a significant tool for improvement of hospital management, the need of introducing the concept would be tremendous. It is assumed that 5S-KAIZEN-TQM shall be introduced to managerial personnel at the secondary hospital (regional hospital) .

2) Strengthening of Maintenance of Medical Equipment

Each health facility is currently responsible for the maintenance of its medical equipment. The inventory, however, is not updated and information and management regarding to the

equipment have not been well organized and adequate trouble shooting has not implemented in current conditions. These issues shall be improved in utilizing available financial resource efficiently. It is considered highly effective to have capacity building opportunities for the medical engineers who are allocated (one to two personnel at each regional hospital) especially for the improvement of the skills on management of maintenance of medical equipment.

4.3 Important Points to Confirm for Future Assistance

In order to formulate the project for the improvement of the medical equipment, following points are important to confirm.

The content and scale of the project shall be assessed considering availability of personnel for the equipment management, financial resources, and related possible allowances. In the case of Kosovo, it would be worth taking into consideration that the government has adapted the health insurance system in April, 2014 in order to gain additional income for health finance and developed a health policy which enables the government to manage health facilities and allocate necessary maintenance fee for infrastructure. Capacity development shall be planned considering further development of skills of medical workers (doctors etc.) for necessary medical department especially pediatric surgery which UCCK plans to introduce in Kosovo.

Table 69 Activities of Regional Hospital

(Statistics in 2010, Kosovo Bureau of Statistics data)

No	Region Name / Facility Name	# of bed	# of physician	# of Nurses	# of Inpatients	# of Surgeries	# of Deliveries
1	Gjilan / Gjilan	414	241	158	16,754	2,077	2,121
2	Peja / Gjakove	417	155	211	17,192	2,797	2,202
3	Peja / Peja	422	201	236	16,147	3,547	2,433
4	Prizren / Prizren	521	240	342	25,668	5,287	4,295
5	Mitrovice / Vushtri	76	57	52	4,213	1,658	650
6	Gjilan / Ferzaj	65	114	99	3,380	101	1,701
7	Mitrovice / Mitrovice	12	119	83	688	147	1,227
8	Mitrovice / North Mitrovice	-	-	-	-	-	-
9	Mitrovice / North Mitrovice	-	-	-	-	-	-
10	Prishtina / Gracanice	-	-	-	-	-	-

Remarks: The candidates' facilities for equipment maintenance are shaded.

1) Necessary medical equipment at UCCK

	Department · Equipment	Q'ty	Japanese Products*		Department · Equipment	Q'ty	Japanese Products*
	Pediatric Surgery : Operation				Pediatric Surgery : ICU		
1	Operation table	3	○	1	Patient monitor	5	○
2	Operation light	3	○	2	Suction unit	5	
3	Electrosurgical unit	3		3	Ventilator	5	○

4	Patient monitor	3	○		Radiology		
5	Anesthesia	3		1	MRI	1	○
6	Urethoroscope	1		2	CT	1	○
	Orthopedic and Trauma : Operation			3	General X-ray	1	○
1	Operation light	4	○	4	Fluoroscopy	1	○
2	Operation table	3	○	5	CR unit	1	○
3	Operation table (Orthopedic)	1	○	6	Picture archiving and communication system	1	
4	Electrosurgical unit	4		7	Ultrasonic diagnostic apparatus（cardiac）	1	○
5	Patient monitor	4	○		Orthopedic and Trauma : ICU		
6	Anesthesia	4		1	Patient monitor	5	○
	Endoscopy center			2	Suction unit	5	
1	Video gastroscope	5	○	3	Ventilator	5	
2	Video colonoscope	4	○	4	ICU bed	5	
3	Video bronchoscope	2	○	5	Infusion pump	5	○
4	Endoscope storage locker	3	○	6	Syringe pump	5	○

Remark: Assumed to be made by Japanese Manufacture

Necessary Medical Equipment at Regional Hospitals (4 hospitals)

	Department · Equipment	Q'ty	Japanese Products*		Department · Equipment	Q'ty	Japanese Products*
	Radiology				Endoscopy		
1	MRI	1	○	1	Video bronchoscope	2	○
2	CT	1	○	2	Video endoscope (gastro and colon)	2	○
3	General X-ray and fluoroscopy	2	○		Laboratory		
4	CR unit	1	○	1	Hematology analyzer	1	○
5	Picture archiving and communication system	1	○	2	Biochemical analyzer	1	
6	Ultrasonic diagnostic apparatus（obstetric）	1	○	3	Electrolyte analyzer	1	
7	Ultrasonic diagnostic	1	○	4	Immunology analyzer	1	

	apparatus（cardiac）						
	ICU			5	Hormone analyzer	1	
1	Patient monitor	5	○		Blood bank		
2	Ventilator	5		1	Blood bank refrigerator	1	
3	ICU bed	5		2	Plasma freezer	1	
4	Infusion and syringe pump	10	○				

Remark: Assumed to be made by Japanese Manufacture

	Department · Equipment	Q'ty	Japanese Products*		Department · Equipment	Q'ty	Japanese Products*
	Operation				Emergency		
1	Operation light	3	○	1	ECG	1	○
2	Operation table	3	○	2	Patient monitor	5	○
3	Patient monitor	3	○	3	Suction unit	5	
4	Electrosurgical unit	3		4	Anesthesia	5	
5	Anesthesia	3		5	Infusion & syringe pump	10	○
6	Suction unit	3		6	Bronchoscope (rigid)	1	

Remark: Assumed to be made by Japanese Manufacture

2) Necessary Medical Equipment at MFMCs (26 facilities)

	Department · Equipment	Q'ty	Japanese Products*		Department · Equipment	Q'ty	Japanese Products*
	Radiology				Laboratory		
1	General X-ray	1	○	1	Hematology analyzer	1	○
2	Fluoroscopy	1	○	2	Biochemical analyzer	1	
3	CR unit	1	○	3	Electrolyte analyzer	1	
4	Ultrasonic diagnostic apparatus（obstetric）	1	○		Dental		
	Endoscopy			1	Dental unit and chair	1	○
1	Video gastroscope	2	○		Emergency		
2	Video colonoscope	1	○	1	ECG	1	○
3	Endoscope storage locker	1	○	2	Patient monitor	1	○

Remark: Assumed to be made by Japanese Manufacture

◆Estimated Amount of Equipment Costs

	Facility	Number of Facilities	Unit Cost (JPY)	Total (JPY)
1	UCCK	1	709,100,000	709,100,000
2	Regional Hospitals	4	572,000,000	2,388,000,000
3	MFMC	26	87,900,000	2,285,400,000
Grand Total				5,382,500,000

Note: Contents of medical equipment at each facility of Regional Hospital and MFMC shall be same package.

Chapter 5

Chapter 5 Current Situation of the Health Sector of Albania

5.1 General Overview of the Health Sector of Albania

5.1.1 Health Sector Overview

(1) General Overview

Albania is a country located in the southwestern part of the Balkans, and has a surface area of approximately 28,748 square kilometers with 2.82 million inhabitants (2011 census). The country is about 340km long from the north to south, and about 150km long from the east to west at maximum. Except for the coastal areas, a majority part of the country consists of mountainous terrain, and approximately 70% of the country is more than 300m above sea level altitude. To the border with Montenegro, Serbia and Macedonia, series of mountains of 2000m class of Dinara Alps continue. As for the climate, lowlands near the coast are rare in snowfall as the typical Mediterranean climate, but there is a large amount of snowfall on the highlands of inland in winter as the continental climate. Annual rainfall exceeds 1,000 mm in general. Maximum temperature in summer is 30 ℃ or more, but the lowest temperature in winter is from 0 ℃ along the coastal areas, to -10 ℃ or even less in inland.

The capital city is Tirana, and the main ethnic group is Albanian but there is a difference in language and customs in the north and south parts of the country. There are some Greeks in the south, and Macedonians and Montenegrins near the border. The official language is Albanian, but it is separated into Ghegu dialect of the Northern area and Tosk dialect of Southern area, and the standard language is close to Tosk dialect. Many people can speak Italian, but some people living in Greek-residents area in the southern Saranda area speak Greek.

The population nominally consists of three main religions- 57% Muslim, 10% Roman Catholic, and 7% Orthodox. There are quite a lot of marriages between different religions in Albania.

For many years Albania, which has taken the socialist system with semi- seclusion practice, began to adapt the open doors policy with the background such as an the end of the Cold War, democratization of Eastern European countries, and the deterioration of economic conditions within the country. And since 1990, Albania has been trying to strengthen relations with developed countries and international organizations and to ensure the security as their fundamental foreign policy. From 1990, it has also been conducting the transition to a market economy in stages, and demonstrating a gradual economic recovery and acceded to WTO in 2000. Then in April 2009, Albania has applied for EU membership and it has been assigning their highest priority to join the EU and NATO. Albania has been granted EU candidate status in June, 2014. As of 2012, both in nominal and real, Albania’s GDP has been at the lowest level among

European countries (except for the countries of the former Soviet Union and former Yugoslavia countries). Albanian major economic indicators are shown in Table 70.

Table 70 Major Economic Indicators of Albania

Major economic Indicators	Year	Indicators and Numbers
Main Industry	2010	Food and tobacco products, Textiles and clothing, Lumber, cement, Chemicals, Mining, Basic metals, Hydropower [GDP component ratio: Service (68.5%) , Industry (12.0%) , Agriculture (19.5%)][(1)]
GDP	2012	USD 12,700 million [(2)]
GNI per Capita	2012	USD 4,700 [(3)]
Economic Growth	2012	2.0% [(4)]
Inflation Rate	2013	1.9% [(5)]
Unemployment Rate	2013	16.9% [(6)]
Major Trade Items	2012	Export Markets: mineral, fuel, electricity, textile, shoes, construction equipment [(7)]
		Import: mineral, fuel, electricity, machinery, food products, beverages and tobacco [(8)]
Major Trading Partners	2012	Export Markets: Italy, Spain, Kosovo, Turkey [(9)]
		Import: Italy, Greece, China, Germany [(10)]
Currency	—	Lek
Exchange Rate	2014 (May)	USD 1.0=Lek 100.7 [(11)]

Source: 1: CIA Worldfactbook, 2: World Bank, 3: World Bank, 4: World Bank, 5: World Bank, 6: CIA Worldfactbook, 7: EIU, 8: EIU, 9: EIU, 10: EIU, 11: OANDA

(2) Health Sector Overview

In Albania, the poverty problem has not yet been solved and even though the improvement is seen in each health indicators, major of health indicators such as maternal mortality rate and infant mortality rate still have room for improvement. The improvement of primary health care services including preventive care, and enhancement of hospital medical services in rural areas would become issues in the future. The strategy document named "National Strategy for Development and Integration 2007-2013" which was adopted in March 2008, medium-and long-term development goals, including the economic and social development and the EU accession strategy, it also defines the health sector goal as "to provide basic, efficient, and high quality medical services to everyone." The challenges facing today are, (1) to correspond to the disease structure change, (2) a complexity of medical security system. As specific strategies for these challenges, needs of improving abilities of operation management in order to make efficient

use of the facilities" and "increasing opportunities to enjoy medical services" are mentioned.

NSDI 2013-2020 (draft), which was formulated in 2012, aims to achieve health coverage (UHC) as a policy by; 1) improving access to medical services, 2) improving quality of medical services by improving clinical and institutional management, and 3) improving medical system management. Currently, the draft has been revised by the new administration, and it is expected to be published as NSDI 2014-2020 in the fall of 2014. It was confirmed in the field survey that efforts are stared to be made to improve the access to medical services for local residents, and to establish new health system with a compulsory health insurance scheme, by improving functions of primary and secondary healthcare infrastructures.

5.1.2 Major Relevant Indicators

(1) Population of Albania

If we look at the demographics after 1990s, it suggests that there are three major waves of population. In 1990s, it is said that people equivalent to 20% of the total population had been flowing out to foreign countries, especially to neighboring countries like Italy and Greece. Total fertility rate (birth rate) had been decreasing, but somewhat it kept relatively high rate from 3.0 to 2.0, thus the population has exhibited a flat situation. Then, from 2000 to 2010, the decreasing trend of the birth rate was observed and it had decreased to near 1.3 in 2007, so the population decrease has also come to be seen. However, the birth rate began to increase after 2012 and returning of immigrants to Albania, the population decrease has seemed to be stopped. We need to observe the trend of the population for a while. Since elderly population over the age of 65 currently is still below the younger population under the age of 15, but the percentage of elderly people over 65 years old is almost 11% of total population in 2012. (It is called aging society if the population over 65 years olds is more than 7% of total population.) Albania is on the way to an aging society. After 2000, however, the elderly population is increasing by extending life expectancy due to economic development and progress of medical technology. However, as it is clear from Table 72, the excessive concentration of urban population has seen in the country, suggesting the needs of revitalization of towns and policies to attract industry in rural areas. Although it seems that some measures have been already taken in the tourism industry in the coastal areas facing the Adriatic Sea, the outflow of the population seems to be still continuing in the mountainous regions bordering Greece and Macedonia.

It cannot be judged only by the statistics of 2012 and 2013, but if the birth rate increase is maintained, the reduction of the population is expected to come to a halt in the future.

Even though it is necessary to watch for the trend of the low birth rate for a while, in any case, the progress of aging society would lead to an increase in the elderly health care costs in the future. Also, to devise necessary countermeasures to the issue of elderly medical care will be required, because without such measures, the burden of the working generation would increase in the field

of social security pension, medical care, and welfare.

Table 71 Transition of Population in Albania

Year	Population	15yrs < (Pop 1,000)	65yrs > (Pop 1,000)	Number of Births	Number of Death	A Population's Rate of Natural Increase	Rough Growth Rate (per 1,000)	Rough Mortality Rate (per 1,000)	Total Fertility Rate (TFR)
2000	3,061,000			50,077	16,421	33,656	16.4	5.4	2.00
2001	3,064,000	897	232	53,205	19,013	34,192	17.4	6.2	2.36
2002	3,051,000	876	241	42,527	19,187	23,340	13.9	6.3	1.94
2003	3,034,000	851	249	45,313	20,294	24,019	14.9	7.0	1.97
2004	3,015,000	826	258	40,989	20,269	20,720	13.6	6.7	1.78
2005	2,993,000	796	269	38,898	20,430	18,468	13.0	6.8	1.60
2006	2,968,000	762	279	35,891	20,852	15,039	12.1	7.0	1.37
2007	2,941,000	728	289	34,448	20,886	13,562	11.7	7.1	1.32
2008	2,913,000	699	300	33,445	20,749	12,696	11.5	7.1	1.41
2009	2,884,000	670	309	34,114	20,428	13,686	11.8	7.1	1.48
2010	2,884,000	641	317	34,061	20,107	13,954	11.9	7.0	1.52
2011	2,829,000	614	323	34,285	20,012	14,273	12.1	7.1	1.54
2012	2,902,000	589	332	35,295	20,849	14,446	12.6	7.4	1.65
2013		565	342	35,750	20,442	15,308			

Remarks: The population census is being done in the above table is only 2001 and 2011.
Source: Albanian Institute of Statistics (INSTAT)

Table 72 Regional Population and Poverty Rate (October 2011)

	Region (Province)	Regional Center (The Number of County / Commune)	Surface Area (Km2)	Population Density	Population			Poverty Rate* (%)
					April 2001	October 2011	Growth Rate (%)	
1	Berat	Berat (3/20)	1,798	159	193,020	141,944	-26	24～28.6
2	Diber	Peshkopi (3/32)	2,586	58	189,854	137,047	-28	>36
3	Durres	Durres (2/10)	766	367	245,179	262,785	7	24～28.6

4	Elbasan	Elbasan (4/45)	3,199	105	362,736	295,827	-18	28.6～36
5	Fier	Fier (3/37)	1,890	198	382,544	310,331	-19	28.6～36
6	Gjirokaster	Gjirokaster (3/24)	2,884	36	112,831	72,176	-36	＜24
7	Korce	Korce (4/31)	3,711	69	265,182	220,357	-17	24～28.6
8	Kukes	Kukes (3/25)	2,374	33	111,393	85,292	-23	＞36
9	Lezhe	Lezhe (3/14)	1,620	100	159,182	134,027	-16	＞36
10	Shkoder	Shkoder (3/28)	3,562	69	256.473	215,347	-16	28.6～36
11	Tirane	Tirane (2/24)	1,652	491	597,899	749,365	25	＜24
12	Vlore	Vlore (3/19)	2,706	67	192,982	175,640	-9	＜24
	Total	36/309	28,748		3,069,275	2,800,138	-9	—

Remarks: Dibura: has a border with Macedonia
Korce: has a border with Greece and Macedonia in mountainous areas
Vlore: faces the Adriatic Sea
Source: Albanian Institute of Statistics (INSTAT), 2011 (*poverty rate is information in 2004)

(2) Medical Statistic of Albania

The main health indicators are shown in

Table 73. Basic health indicators of Albania, such as life expectancy and infant mortality are better than those of other Balkan countries. However, taking the fact that pregnancy complications have become a major disease in the hospital statistics, an increasing trend of neonatal disease (Table 74, Disease statistics in hospitals), and infant mortality rate and maternal mortality rate are still worse than other EU countries, there is still room for improvement as well as other Balkan countries. These facts are indicating that enhancement of preventive medicine, including antenatal care, supposed to be needed, in conjunction with skill improvement of obstetrics and gynecology specialist, and pediatrician. On the other hand, even though the total expenditure on health as a percentage of GDP of Albania has not yet reached to 7-10%, which most of the other EU countries achieved, the percentage is relatively close to the rate (6.3%). It is believed that future, an increase in medical expenses resulting from an increase in demand for social welfare and progress of aging would become the inevitable challenges for Albania.

Table 73 Main Indicators of Albania

NO	Main Indicator	Albania	
1	Total Population	2,800,138 (1)	2011
2	Population: The percentage of 0-14 years old (%)	21.00 (1)	2011
3	Life Expectancy (years old)	77.04 (1)	2011
4	Under-5 mortality rate (U5MR) (per 1,000 birth)	21.0	2006
		18.00 (6)	2010
5	Infant Mortality Rate (under 1) (per 1,000 birth)	22.60	2006
		15.00 (2)	2012
6	Maternal Mortality Rate (MMR) (per 100,000 birth)	21.0 (2)	2013
7	Total Expenditure on Health as % of GDP	6.30 (2)	2011
8	General Governmental expenditure on Health as % of total government expenditure	8.40 (2)	2010
9	Rankin of HDI (among 186 countries)	0.739 / 70 (5)	2012
10	GNI per Capita (USD)	3,980 (3)	2011
11	Adult literacy (%, over 15 years old)	95.94 (3)	2008
	Adult literacy (%, over 10 years old)	-	-
12	Percentage of the Population that has access to safe water	95.00 (4)	2010

Source: 1: National Institute of Statistics, Albania, Last Census （2011）
2: WHO, 3: WB, 4: United Nations Statistics Division （UNSTATS）,
5: UNDP Report 2013, 6: UNICEF, 7: UN

According to WB statistics in 2012, the average of Under-five mortality rate is 6.4 (per 100 live births), the average of infant mortality is 5.8 (per 100 live births) and the average of maternal mortality rate is 8.6 (per 100,000 live births) in Balkan countries (Bosnia and Herzegovina, Greece, Macedonia, Montenegro and Serbia). Those rates in Albania are higher than those of other countries. According to the UNICEF Albania[21], higher infant and maternal mortality rates compared to other EU countries stem from dysfunction of PHC system due to its vulnerable economic infrastructures with insufficient financial resources and the lack of medical equipment. In addition to that, disparities in the level of health care facilities in rural areas, including the northern areas, also affect the situation. As for per capita government expenditure on health, even though the EU countries average is $ 1709 in 2013, it has remained about $ 256 in Albania. Medical facilities with the Department of Obstetrics and Gynecology are fairly limited in rural areas, as well as pharmaceuticals and medical equipment. In addition, 22-23 % of children under 5 are said to be malnourished (stunting) in Albania. [22]This malnutrition rate is higher than the EU average, which is 7.5 %, and UNICEF has pointed out that the infant mortality rate is closely related to the problems of poverty and poor nutritional status.

[21] http://www.unicef.org/albania/children.html
[22] World Health Statistic 2014

In addition, according to MoH, health workforce shortage is also one of the factors which have contributed to the problem. In the EU countries, the densities of nurses/midwives and physicians per 100,000 population are 33.1, and 80.5 (2013) respectively, but in Albania, these are 11.5 and 39.9 respectively (2013). [23]In the field, midwives, who are in charge of all perinatal care, have few opportunities to update the medical knowledge and are working in poor working environment with low salary. It is reported that only 18% of pregnant women of Albania are receiving maternal medical examination in early pregnancy, thud it suggests that the medical staff have not been able to intervene appropriately to pregnant women.[24]

Also, as views of other donors on health-related indicators of Albania, WHO, while acknowledging that infant and maternal mortality rates have been improving greatly since the 1990s, concerns the mortality rate of non-infectious diseases has been increasing in recent years. [25]WHO has also been concerning health financing issues, such as high proportion of out-of-pocket expenditure and informal payment of medical costs, due to corruption. WHO therefore has been supporting efforts to strengthen health system management, especially health financing. UNDP Albania also acknowledges that Albania have made significant success for the "Reduce child mortality", which corresponds to the MDGs 4 in the "MDGs Report".[26] UNDP believes that high rate of births attended by skilled health personnel and at medical facilities, and the improved immunization rates both have particularly contributed, and further investment and training of medical personnel to improve their capacity will realize future reduction of these indicators,
As for "the reduction of maternal mortality," which corresponds to MDGs 5, the indicator has been improved, but not as much as it was expected and various problems are still remained. UNDP has raised the needs for providing maternal and child health services for people living in mountainous areas where access to medical facilities is limited. It insists that the establishment of fair health system and the reconstruction of health financing are also needed, by pointing out the fact that in Albania, people have to bear informal payment for service providers at all the levels of health systems, which has been a huge burden for the poor, as WHO is also concerning.

Therefore, development partners have found that it is necessary for Albania to strengthen the health system for the purpose of reconstruction and strengthening of health financing.

(3) Disease Structure of Albania

Information related to illness and death in medical facilities (hospital statistics) is as follows; According to the trends of the disease situation over the past decade, Complication of pregnancy is

[23] World Health Statistic 2014
[24] http://www.europe-cities.com/en/633/albania/health/
[25] WHO: Country Cooperation Strategy at glance, Albania (updated May2013) (http://www.who.int/countryfocus/cooperation_strategy/ccsbrief_alb_en.pdf?ua=1)
[26] UNDP Albania: MDGs Eight Goals for 2015 (http://www.al.undp.org/content/albania/en/home/mdgoverview/)

the highest number of patients except 2008 from 2002 to 2011. Parasite and infectious disease have started to decline, but the disease of the digestive system and respiratory system, and pregnancy complications have been major diseases themselves and they exhibited a flat situation without any major change during recent 10 years. In addition, although it is a slight change, the increasing trend has been observed in tumor, cardiovascular disease, and neonatal disease.

With regard to mortality, the mortality rate is relatively low for parasitic diseases, infectious disease, and endocrine/metabolic disorder. On the other hand, although the mortality rate is relatively high, improvement was brought to the particular medical service for respiratory disease. The diseases which still have high mortality rates are cardiovascular disease and tumor, and to establish a medical service system will be required by taking medical measures to deal with adult diseases such as stroke, cancer and heart disease, in the future.

Table 74　Disease Statistics in Hospitals（per 100,000 Population）

Disease name	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Infectious/ Parasitic diseases	631.3	691.5	531.2	577.2	560.8	646.9	602.0	631.4	633.9	533.5
Tumor	423.0	415.1	403.2	441.3	443.3	564.1	572.4	593.0	625.7	619.2
Endocrinology / Metabolic disorders	119.8	119.6	126.4	125.2	134.0	144.9	138.5	152.7	140.8	150.8
Blood, Hematopoietic-related diseases	98.5	94.5	90.8	101.4	58.1	64.9	58.7	58.7	62.2	73.3
Mental Disorder	139.5	127.7	143.6	134.3	134.2	116.8	130.0	128.5	157.3	180.2
Nervous System disorder	386.3	378.9	370.5	331.3	315.6	361.4	348.4	373.7	348.2	353.9
Circulatory diseases	608.5	655.9	646.3	656.5	681.6	716.8	705.3	785.3	767.2	883.4
Respiratory disease	1384.8	1442.8	1345.8	1501.3	1247.4	1527.0	1223.4	1482.0	1331.9	1487.6
Digestive System disorder	1365.9	1397.0	1421.4	1409.2	1265.6	1357.7	1355.1	1378.3	1341.2	1320.3
Urinary, Organs / Genital abnormalities	463.0	430.9	470.3	504.3	437.0	492.9	428.8	496.6	477.1	522.6
Complication of Pregnancy	1671.5	1791.3	1656.9	1680.3	1469.6	1593.0	1280.9	1533.8	1504.8	1601.2
Skin / Tissue Abnormalities	122.0	131.8	118.9	114.4	115.9	113.9	109.1	126.0	129.7	134.2
Bone, / Muscle system diseases	119.5	115.0	112.6	112.2	125.8	135.9	123.1	127.4	135.2	143.2
Congenital Abnormality	51.2	49.2	46.1	88.4	58.7	51.8	57.1	50.0	55.3	57.0
Neonatal disease	8.1	75.3	43.2	44.3	75.5	78.8	77.1	96.8	109.2	114.2
Unidentifiable disease	53.5	68.8	70.9	71.3	69.8	83.3	102.2	123.9	81.3	68.4
Trauma,/addiction	456.9	434.2	396.8	423.6	418.6	472.3	442.4	438.5	454.9	522.2

Source: Albania MoH

Table 75 Mortality Statistic in Hospitals（per 100,000 Population）

Disease name	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Infectious / Parasitic diseases	3.00	3.1	3.0	3.1	2.5	2.9	1.9	2.0	1.0	1.0
Tumor	82.80	86.9	95.5	92.9	88.1	92.7	77.8	85.9	82.2	64.0
Endocrinology / Metabolic Disorders	5.50	5.7	5.9	6.8	6.3	7.2	2.8	1.9	1.0	1.0
Blood, Hematopoietic-related diseases	1.70	1.7	1.6	2.0	1.7	1.8	1.5	0.8	1.0	1.0
Mental Disorder	3.70	2.6	2.6	3.4	3.7	4.0	1.7	1.6	1.5	2.0
Nervous System disorder	13.80	12.9	15.3	16.0	14.2	15.1	12.8	4.8	4.9	8.0
Circulatory diseases	262.40	260.7	288.5	285.4	281.5	284.5	245.0	294.0	286.2	209.0
Respiratory disease	28.90	29.7	32.9	30.5	25.7	24.5	19.3	15.7	15.2	11.0
Digestive System Disorder	11.40	10.0	10.1	10.1	9.6	10.5	9.0	8.8	8.9	6.0
Urinary, Organs / Genital Abnormalities	11.00	9.0	8.3	8.0	9.0	8.4	7.9	8.1	7.1	6.0
Complication of Pregnancy	0.20	0.2	0.0	0.03	0.20	0.20	0.20	0.10	0.00	0.00
Skin / Tissue Abnormalities	0.30	0.2	0.3	0.16	0.30	0.40	0.10	0.03	0.10	0.00
Bone,/ Muscle System diseases	1.10	1.3	1.3	1.2	1.1	1.2	1.0	0.6	0.4	1.0
Congenital Abnormality	2.00	1.5	2.0	1.8	1.6	1.8	2.6	1.6	1.2	1.0
Neonatal disease	5.50	3.3	3.0	2.0	2.2	2.0	1.6	2.5	1.5	1.0
Unidentifiable disease	46.50	55.4	65.2	65.3	68.4	49.2	44.3	49.8	50.4	46.0
Trauma,/ Addiction	44.80	40.3	39.2	38.9	38.6	31.5	30.5	31.1	29.0	22.0

Source: Albania MoH

Table 74 and Table 75 show the trends of the past 10 years of major diseases of Albania. It is observed that tumors and circulatory system diseases has been increasing and the number of diseases remain unchanged. Thus it is necessary to devise countermeasures for these diseases.

1) Pregnancy complications

Pregnancy complications are the most common in the hospital statistics on disease, and the situation remains unchanged over the past 10 years. In addition, as for mother and child health, even though the number of the newborn diseases is not much, it has been increasing over the past decade. Further, again, even though it is not necessarily to be classified as a relatively large portion, nor a disease limited to gynecological areas, the numbers of urological and genital

defects which tend to have strong association with women's diseases remain unchanged. Number of deaths, however, is decreasing trends of either disease.

2) Non Communicable Diseases (NCDs)

After pregnancy complications, respiratory disease and digestive system disorder are second most frequent diseases in the hospital statistics on disease. Even though the numbers listed in the statistics is not much, endocrinology and metabolic disorders are also on the list. The numbers of these diseases are unchanged over the past decade, but the death tolls of either diseases have declined. On the other hand, tumors and cardiovascular disease which occur frequently followed by respiratory diseases and digestive diseases have been increasing in the numbers of disease while the number of death remains unchanged, indicating that certain intervention is required.

3) Infectious disease

Infectious disease has been listed at sixth from the top of the hospital statistics of disease with increasing trends, but its mortality rate has been decreasing.

4) Accident

The number of accident is followed by that of infectious disease and the number is increasing, but its mortality rate is decreasing.

For reference, the diseases information which was described above has been compiled by Swiss Development Cooperation (SDC) and published as follows:

(1) Maternal and Child Health Services

Since 1990, the maternal mortality ratio of Albania has achieved a reduction of 44% is comparable to the neighboring Balkan countries (i.e. -46% of Serbia, -56% of Bosnia and Herzegovina). Since the 1990s, bilateral and multilateral aid agencies have provided assistance to Albanian Government in the field of public health sector and health sector reform. Among these assistants, it is considered that active support for the reproductive health field has contributed to the improvement of maternal and child health indicators. In addition, the promotion of perinatal care supported by USAID since 2000, which was advanced at local community level, also contributed greatly to this improvement. WHO World Health Statistics 2014 shows that infant mortality rate, which was 25 in 2000 (per 1,000 live births) has been improved to 15 in 2012.

However, hospitalizations due to complications of pregnancy occur many times even now.

In rural area, since it is difficult to access medical facilities, providing quality prenatal care is still a challenge. Thus it is said many pregnant women with difficult conditions are transferred to the University Hospital of the capital Tirana, because antenatal care is still insufficient in rural area.

(2) Non Communicable Diseases (NCD)

Among the NCD, a cardiovascular disease, a chronic respiratory disease, diabetes, many tumors (cancer), and metabolic diseases like neuropsychiatric conditions have become the most critical diseases. Currently, these diseases are also a major causes of death in many parts of the world, including the Western Balkans. WHO indicated that the age standardized mortality of NCD is 2-3 times higher compared to the region of Western Europe (for instance, among male in France, the case of NCD is 400 per 100,000 populations, but approximately 1,000 in Albania). Furthermore, the cause of death of NCD, which account for 38% of it, force the patients'' family to pay for formal or informal health services, which leads to an increase in the financial burden and the reduction of the labor force in the family.

(3) Accident

According to the statistics of 2009, 14,000 people who were hospitalized and among them, 891 people resulted in death and 24% of them have died by traffic accident. The number of hospitalized patients per 100,000 populations is on a downward trend from 2000 thanks to an enhancement of emergency medical services. However, a difference in gender is obvious. When we look at the working age population layer, four times more men resulted in death by accident than women, and it suggests that intervention to promote the safety against accident of business (trauma accidents of outdoor work or during an accident while driving) would be important.

(4) Infectious Disease, Sexually Transmitted Diseases (STD), HIV/AIDS, and Tuberculosis (TB)

The number of inpatients for infections and parasitic diseases has been flat in recent 10 years. The main diseases of this category are assumed to be digestive system diseases, and respiratory infection. Case reports of infectious diseases which are preventable by vaccination, such as measles, began to decrease since 2010. Although hepatitis has still been reported, case report has been halved to 100 per 100,000 populations in 2010, compared to reports of 200 in the 1990s.

For sexually transmitted diseases (STD), the results of surveillance and disease specific data have not been reported, but ADHS from 2008 to 2009 has been pointed out the issue that there is a need of uplifting public awareness in STD (i.e. The utilization of condoms is low, two third of the respondents according to the questionnaire have sexual intercourse without sufficient knowledge of HIV/AIDS etc.). Since 2007, the Global Fund began to invest a grant of USD 5.1 million to Albania. By 2012, 160 people are treated with anti-retroviral therapy (ARV).

For Tuberculosis (TB), new smear-positive cases of 160 are detected in 2011, and a treatment with DOTS has been attempted. Since 2000, mortality rate and incidence rate of TB have declined from 23 to 14, and from 0.8 to 0.4, repeatedly (per 100,000 population), and the treatment success rate is

as high as 89%. Since 2007, the Global Fund has been delivering USD 1.2 million to support TB control of Albania.

5.2 Health Administration, Health Policy and Health Budget

5.2.1 Health Administration

The Ministry of Health plays a leading role in health administration, and it consists of 25 divisions and nine departments. Figure 3 shows the organogram of the Ministry of Health.

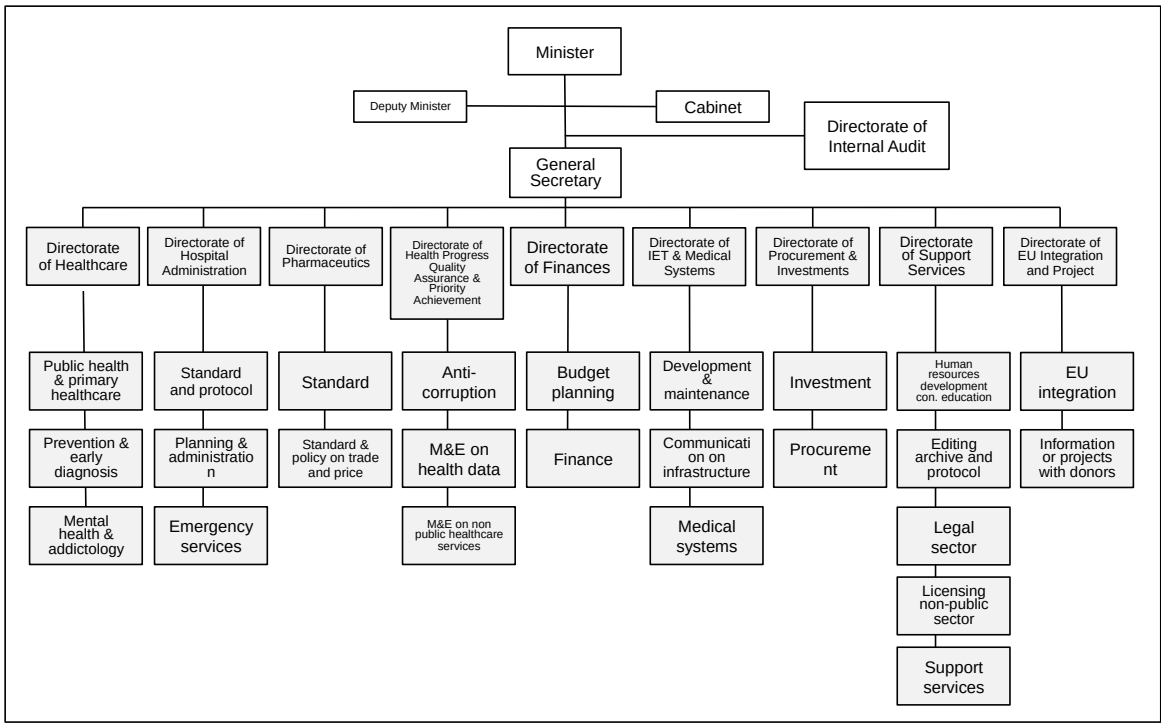

Figure 3 Organogram of the Ministry of Health

In Albania, the whole country is divided into 12 counties, and 36 districts under counties and 309 communes as administrative district under districts were placed. Including the Mother Teresa University Medical Center, which is a tertiary medical facility, MoH exercises jurisdiction over secondary medical services facilities such as Regional Hospital. The primary health care service facilities, including health centers are under the jurisdiction of Public Health Directorates. In total, there are 43 public hospitals in the whole country, including the capital city of Tirana.

5.2.2 Health Policy

In the general election, which was conducted in June 2013, “Alliance for European Albania" led by a Socialist Party led by a large margin and won power over the long-ruling Democratic Party for the first time in eight years, and realized the regime change. “National Strategy for Development and Integration 2014-2020 (“NSDI 2014-2020", published in June, 2013) " which was formulated in the Democratic Party regime has been currently revised by the new administration and it is expected that the content has been reviewed and new version of NSDI2014-2020 is to be published in the second half of 2014.

The following backgrounds existed during settling on NSDI 2007-2013[27]; the health care system was facing some challenges, as the epidemiological profile of the population was changing. Non-communicable diseases, mainly cardiovascular disease and cancer, were becoming the leading cause of death. Among new health risk factors are the high tobacco consumption and changing diets. Therefore, the health system needed to adjust to the lengthy and costly treatments associated with these diseases and shift to preventive health care and public health campaigns. On the other hand, the health financing system has been fragmented. This issue is beginning to be addressed through the transfer of the financing of primary health care to the Health Insurance Institute as of 2007. Payroll tax-based health insurance results in further inequity in access to health care. Only a small part of the population contributes in the absence of a formal labor market, administrative capacity and oversight structures.

The original NSDI 2014-2020 made by the old regime advocated that “health sector reform is aiming at providing more effective medical services and establishing the well-managed medical institutions by improving health governance and developing health human resources. Eventually it is expected to ensure access to quality health care services and to expand preventive medicine.”

The health development strategy of “NSDI 2007-2013” and “NSDI 2014-2020”are shown in Table 76. NSDI 2014-2020 aims at realizing universal health coverage (UHC) by; 1) improving access to medical services, 2) upgrading quality of medical services by improving clinical and institutional management, and 3) improving medical system management.

[27] National Strategy for Development and Integration 2007-2013, Republic of Albania Council of Ministers in 2008

Table 76 Priority Issues of Health Development Strategy in NSDI

NSDI 2007-2013	NSDI 2014-2020
1) Increase the capacity to manage services and facilities in an effective way - Introduce a new public-private mix and innovative organizational schemes - Improve facility and clinical management at all levels - Continuously improve health system quality and safety - Improve health services management	1) Increase access to effective health services - Improve the health services Infrastructure and distribution mapping - Maintain and develop health programmes to ensure public access to basic service, with essential services offered free of charge - Expand the reimbursable medicaments scheme - Offer sustained pharmaceutical coverage
2) Increase the possibility to receive effective health services - Reduce financial, geographic, cultural and professional barriers - Articulate a network of services able to ensure continuity of care - Provide widespread free essential public health services - Provide solid pharmaceutical coverage	2) Improve the quality of services through improved clinical and institutional management - Establish innovative organizational schemes and a new public-private partnership(PPP) - Improve clinical and administrative management of health institutions at all levels through - Continuously improve the quality and safety of the health system
3) Improve the system of health financing - Increase pre-paid coverage - Reduce informal money flows - Improve resource allocation by a single strategic purchaser	3) Improve health system governance - Improve transparency and accountability - Reduce non-official money flow in the system - Improve allocation of financial resources - Reduce inequalities in the health sector - Mainstream public health in all policies
4) Improve the governance of the health system - Strengthen the capacity of the Ministry of Health to develop policies, strategies and planning at national level - Regulate better. A clearer and more enforceable regulatory framework is needed - Improve transparency and accountability - Establish a health information system	4) The disparity reduction in social health sector - Incorporated of public health aspect into health policy

Source: National Strategy for Development and Integration (2007-2013 and 2014-2020)

First of all, in order to provide the people with access to quality health services, NSDI cites an effective use of family doctors[28] who are responsible for primary health services, and aims to make best use of family doctors to establish a functional referral system from primary level to tertiary level.

[28] The family doctor performs simple treatments and diagnosis. In Albania, when it is injured or in an emergency, people can call the family doctor, or go to hospital with emergency facilities nearby.

Next, it expected to ensure appropriate patient transportation to secondary and tertiary medical facilities by introducing the medical service package and the clinical protocols (standardized medical procedures).

Furthermore, an autonomy (discretion) has been given to the people in charge of each primary health care facility to improve its own facility management, so that they would be able to provide more self-sustaining healthcare services.

In fact, when comparing the medical care visits by family doctor before and after the concept of autonomy is introduced, it has increased from 5.7 times to 9.3 times in 2011. It also suggests the improvement of services to patients, as well as the improvement of facility management by increased refund income from health insurance.[29]

5.2.3 Health Budget

(1) General Information

The total amount of expenditure on health sector in 2009 is approximated 65 billion Lek. 50% of total amount of expenditure is from Governmental fund, 47% is from Private fund and 3% is from Assistance by Development Partners. Total amount of expenditure on health sector in 2009 is 5.7% of GDP. As indicated in Table 77, procurement of medicine and equipment accounts for about 40% and treatment is about 40%, and for rehabilitation, investment, and public health activities 5-7% of total expenditure on health sector have been spent.

In addition, even though it is not disclosed, the Ministry of Health has provided 276,088,000 Lek for administrative expenses, 9,639,975,000 Lek for the primary health care services, 16,074,973,000 Lek for secondary and tertiary health care services, 2,391,354,000 Lek to public health activities, and in total, 28,382,390,000 Lek, as expenditure of 2013.

The Ministry of Health has attributed the reduced government budget allowance from 2009 to the rise of the private sector.

[29] WB Report

Table 77　Health Budget and Expenditure in the Ministry of Health（unit: Lek）

	The Source of Health Budget	2007	2008	2009
1	Government	25,441,700,000	29,112,314,000	32,414,293,000
2	Private	25,940,352,000	28,923,492,000	30,647,333,000
3	Assistance from Development Partners	622,926,000	1,582,959,000	2,104,734,000
	TOTAL	52,004,978,000	59,618,765,000	65,166,360,000
	Proportion of GDP（%）			
1	Government	2.63	2.68	2.81
2	Private	2.68	2.66	2.66
3	Assistance from Development Partners	0.06	0.15	0.18
	TOTAL	5.37	5.49	5.65
	Expenditure	2007	2008	2009
1	Procurement of Medicine and Equipment	42.5%	41.5%	40.6%
2	Treatment	35.7%	39.6%	37.8%
3	Rehabilitation	5.8%	5.9%	7.0%
4	Investment	5.7%	5.3%	6.7%
5	Auxiliary Service	2.6%	2.5%	3.6%
6	Public Health	6.2%	3.5%	3.2%
7	Administrative Management	1.3%	1.4%	1.0%
8	Long Term Nursing Care	0.1%	0.1%	0.1%

Source: Ministry of Health

(2)　System for Health Insurance

1) Outline of the Medical Insurance System

Medical insurance for all citizens is mandated by Medical Insurance Act (On compulsory healthcare insurance in the Republic of Albania) from 2011. The medical insurance fund is established as a central public institution, and medical services are provided to subscribers of the insurance by the contract between the fund and various medical facilities and pharmacies.

Subscription of health insurance and payment of insurance premiums are required to all workers over the age of 18. Business employers and the insured are paying half of the 3.4 percent of the income of the insured. However vulnerable people, who have difficulties to pay the premium, such as unemployed, pensioners, young children, students under the age of 25, and disabilities, the insurance premiums is to be exempted and it is to be covered by the government as the

insurance mechanism.

Medical services that are to be provided by the contracted medical institution by a medical insurance are emergency medicine, pediatrics, adult medical practice, gynecology, medical treatment for the elderly, psychiatric, and health education. Healthcare providers for this service organization are public medical facilities and private health centers that contract with the insurance fund, and in public health care facilities, medical services examination and treatment, and in private medical facilities, examination of the primary-level medical services and treatment are to be provided. The medicines, medical tests and procedures by contracted provider are also covered by the insurance.

Other than the above, costs of clinical examination, X-rays examination, newborn and infant care, pharmaceuticals which are necessary for cancer treatment and renal transplantation are all to be reimbursed by the medical insurance fund. According to the annual report 2012 issued by the medical insurance fund, it is reported that since the medical insurance plan was implemented in 2012, the Albanian government started an awareness campaign and distributed public booklets for the purpose of providing information of the health insurance system for the general public. As a result of introduction of medical insurance system, users of primary health care facilities have significantly increased to 130,000 people in 2012, from 100,000 in 2011.

2) Status of Funds and its Expenditure

Sources of funding for medical insurance fund are made up of three sources, namely; contributions from the insured, subsidies from the government, and other source. Percentages of the source of funding in fiscal 2012 is as follows:

Table 78 Revenue (Unit: 1 million Lek)

Revenue	Planned	Actual	Percentage of the Actual Revenue against the Planned Revenue (%)	Proportion to Overall Revenue (%)
State Subsidy	9,057,000	9,057,000	100	57.9
Contributions from the Insured	6,246,000	6,467,034	103.5	41.3
Others*	190,000	124,208	65.3	0.8
Total	15,493,000	15,648,22	101	100

*Remarks: “Other” includes bank interest income, fee for the service offered, sales of booklets related to medical information, sales of prescription template, etc.

Source: Health Insurance Fund, Annual Report 2012

As shown in Table 78, subsidies from the government accounted for about 60% of the fund, and a

similar trend has been observed in 2013 as well. On the other hand, expenditure status of the medical insurance fund is shown in Table 79. Although the refund of drugs and an allowance to Durres Hospital are conducted as planned, and for primary care services and the benefits for the management department were also done at a high rate of 96.2% and 99.8% respectively, in the investment field, the refund amount remained in just 27.7% of the plan.

Table 79 Expenditure (Unit: 1 million Lek)

Expenditure	Planned	Actual	Percentage of the Actual Expenditure against the Planned Expenditure (%)	Proportion to Overall Expenditure (%)
Drug Refund	7,881,000	7,880,269	100	51.0
Primary Health Care	6,260,000	6,246,328	99.8	41.0
Administration Costs	657,000	631,782	96.2	4.0
Investment	10,000	2,766	27.7	0.0
Durres Hospital*	685,000	685,000	100.0	4.0
Total	15,493,000	15,446,146	99.7	100.0

*Remarks: Durres Regional Hospital is the only hospital for which hospital refund system of medical insurance is adoptable in Albania. The mechanism to include the refund system into medical insurance was introduced to Durres Hospital as a trial. This mechanism is expected to be introduced into other regional hospitals.

Source: Health Insurance Fund, Annual Report 2012

The above is a reference for the expenditure of health insurance fund to the financial resources which is directly benefited from the fund. And if a financial resource directly from government (Local Government's Finance Bureau) were added to the financial resources managed by the health insurance fund, it appeared that primary care services accounted for 41% of the total expenditure, 51% for the refund of the drug, and 4% for administrative expenses.

A refund of the drug is intended to mean a refund of drug charges for prescription that is issued when patients received the primary health care services. Pharmacies are to receive a refund according to their claims to medical insurance fund for the drug prices that were paid for patients. Medicines that can claim a refund of payment are listed and updated annually.

The expense on primary care services is mainly for labor costs of staff (doctors, nurses, etc.) who work in the health center. 80% of the labor costs are calculated according to the population ratio

by which each health center covers, and costs for bonuses and business evaluation account for 10% each. Health Centers are operated by the Board of Directors as an independent organization. Medical consumables required for medical services are secured separately by this organization. A local government holds the responsibility of investment budget of Health Centers.

As described above, the local government Treasury has provided financial resources for hospital medical services. In 2012, 13,441,000,000 Lek in total was provided, and among them, 48% was allocated to labor costs, and 44% was allocated to medical material costs and services.

3) Challenges of Medical Insurance System

In fiscal 2012, a plan shown below was made and implemented in an attempt of system improvements.

- To strengthen the network connectivity of the large-scale insurance center with hospitals and the data center in urban area
- To establish and strengthen the E-Pharmacy system for faster payment
- To promote effectiveness of medical services by computerization of patient information
- To strengthen the PHC information collection system (Network is connected only 114 Health Center out of 430 as of 2012.)
- To analyse medical services costs in hospitals
- To expand the service content of the medical insurance adaptation package
- To increase private health care facilities where their services can be covered by health insurance

Although these activities have been carried out to some extent, but they are still underway and have not yet reached to a sufficient level, thus further continuous efforts are required.

In particular, the application of medical insurance fund for hospitals should be paid special attention. Current issues are the poor collection rates by compulsory health insurance system (amount of collection is about only equivalent to 20% of the public health care costs covered by the government), and the fact there is still no hospital which applied the medical insurance fund scheme, other than Durres Hospital. From the fact that the situation is stable in current expenditure management of refunds for the drug and primary care services, it is now necessary to proceed with improvement of quality of services and the system scale-up in the future. On the other hand, the insurance coverage for hospital medical services has not yet started virtually. Further, the data collection system as a mechanism for applying the insurance system to medical services in hospitals has not yet been established fully. On the other hand, for the update of NSDI 2014-2020 (review), the new government (Ministry of Health) pays special attention to the revision of the forced medical insurance system. Thus a new direction will be shown by the government in the latter half of the 2014[30].

[30] Information from MoH

5.3 Medical Delivery System

5.3.1 Health Service

(1) Health Care Services Overview

As public health facilities, there are PHC facilities (the primary health care facility), District Hospitals, Regional Hospitals, Medical University of Tirana and Mother Theresa University Hospital Center and specialized hospitals. Health Center, Health Post, and Polyclinic are regarded as the primary level health care facility, called PHC facility. District hospitals and Regional hospitals are regarded as the secondary level health care facilities, and Mother Theresa University Hospital Center as a state-run hospital and specialized hospitals are regarded as the tertiary level health care facilities. As for specialized hospitals, there are two university maternity hospitals, a lung disease hospital, and a trauma center. The number of medical institutions and medical service contents in Albania are shown in Table 80.

The primary health care facilities provide initial medical services (outpatient care services), in addition to preventive medical care, prenatal checkups, family planning, and immunization. Secondary medical facilities are responsible for hospital medical and providing diagnosis based on the various inspections and hospitalization services. Patients who are unruly in the secondary health care facilities and in need of advanced medical services will be transported to tertiary care facilities in the capital city.

Table 80 Medical Facilities of Albania

Classification	Facility	Number of Facilities
Primary Health Care Facility	Health Center	475
	Health Post	1,927
	Polyclinic	48
Secondary Health Care Facility	District Hospital	33
	Regional Hospital	11
Tertiary Health Care Facility	National Hospital	1
	Specialized hospital	4

Source: Health Sector Assessment, Swiss Cooperation (2010)

Albania is divided into 36 districts as political jurisdiction, and basically there is one hospital per district. A District Hospital which has become a center of two to three districts is called a Regional Hospital. In addition, in the capital city of Tirana, there are the Mother Teresa University Medical Center as the university hospital and several specialist hospitals. For example, there are the Trauma Center (under the umbrella of the Ministry of Health), which was a former

military hospital, and the Cardiovascular Center that specializes in circulatory system diseases, such as heart disease.

Across the country, there are 421 Health Centers responsible for primary care services. Since there is no secondary health care facility (hospital) in the capital city of Tirana, there is a Health Centers that can provide advanced medical services compare to other districts, called Polyclinics. Family doctor is working at based at a health center, and they also carried out home visit medical services as outreach activities.

Elimination and consolidation of hospitals has been considered. While the function of District Hospitals that is located nearly as one facility per district would be simplified (by downgrading its level into equivalence to Daily Hospital or Health Center level), 12 Regional Hospitals are to be upgraded with additional functions such as emergency medical services and outpatient service. Thus existing 14 District Hospitals are expected to be newly equipped with medical equipment which enables them to provide emergency medical services.

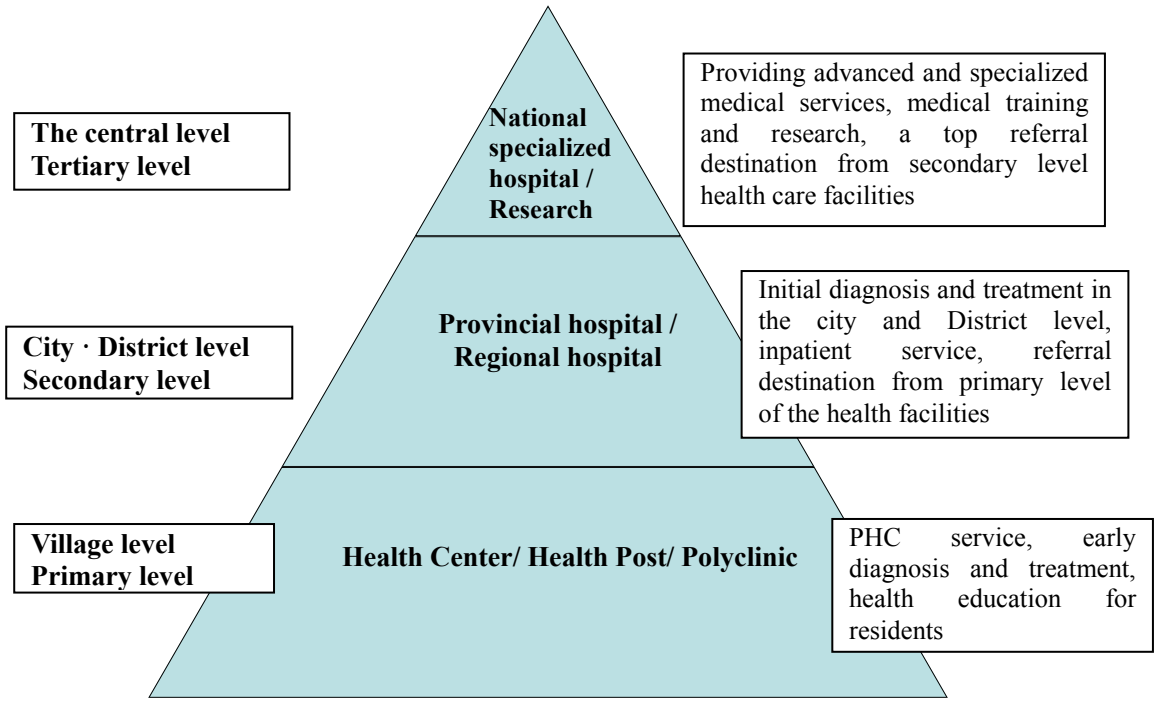

Figure 4 Referral System of Albania

Table 81 Covered Population, Covered Areas, Staffing and Contents of Health Service Provided

	Health Facility	Covered Population	Covered Areas	Number of Beds, Staffing	Health Care Services to be Provided
Primary	Health Center	7692.3 pop per facility	Commune[31] level	Family Doctor, Nurse	Immunization, health education, maternity screening, family planning, small surgical procedures, diagnostic, rehabilitation, pharmaceuticals supply
	Health Post			At least 3 Family Doctors	Immunization, health education, maternity screening, family planning, small surgical procedures
	Polyclinic			1 or 2 Family Doctors	
Secondary	District Hospital	One facility per district	District	100-400 beds, General practitioner, Specialist, Nurse, etc.	Surgery, pediatrics, obstetrics and gynecology, internal medicine, inpatient and outpatient service
	Regional Hospital	294117.6 pop per facility	Municipality	100-500 beds, General practitioner, Specialist, Nurse, etc.	Surgery, pediatrics, obstetrics and gynecology, internal medicine, ophthalmology, orthopedics, external injury , neurology, psychiatry, internal medicine of chest, Department of Infectious Diseases
Tertiary	Mother Teresa University Hospital Center	Nationwide	Municipal and National levels	1,400 beds, Specialist, Nurse, etc.	Provision of specialized and advanced medical service
	Specialized Hospital	Nationwide	Municipal and National levels		Provision of specialized medical services of tertiary level

Source: Answers to questionnaires and results of interviews

[31] Commune: Aggregate of 4-5 villages.

(2) Trends and Distribution of Health Facilities

Table 82 Changes in Public Health Facilities of Albania

Health Facility	2009	2010	2011	2012
Primary Health Care Facilities				
・ Health Centers	-	475	-	-
・ Health Posts	-	1,927	-	-
・ Polyclinic	-	48	-	-
District Hospitals	33	33	33	33
Regional Hospitals	10	10	10	10
National Hospitals, Specialized Hospitals	11	11	11	11

Source: Answers to questionnaires, Health Sector Assessment (Swiss Cooperation 2010)

(3) Trends in the Number of Beds

Table 83 shows a comparison of the number of beds per 10,000 populations. For reference, the number of beds in Japan by the same data is 137 beds.

Table 83 Number of Beds per 100,000 Populations (Average in 2005 – 2012)

Country	Albania	UK	Germany	Macedonia	Italy
Number of Beds	24	30	82	46	35

Source: Global Health Facts; http://kff.org/global-indicator/hospital-beds/

The number of beds of Albania has dropped from 10,161 beds in 2000 to 8,410 beds in 2012. As for the number of beds per population ratio, rare data has been disclosed in that the bed occupancy rate[32] of Regional Hospitals and District Hospitals is around 50%, in spite of the fact that the number of beds is less compared to that of other neighboring countries. Since there might be structural defects that prevent hospitalization in Regional and District Hospitals, in addition to the fact that the patient is concentrated in tertiary care facilities in the capital, the cause of the above-mentioned phenomenon is to be explored.

[32] Bed occupancy rate (%) = number of hospitalized patients×100/ number of beds×365(days)

Table 84 Basic Data Related to Hospital Medical Services in Albania

No	Indicator	2008	2009	2010	2011	2012
1	Number of Hospitals	45	44	44	44	44
2	Number of Beds	9,092	8,805	8,707	8,711	8,410
3	Number of Inpatients	260,164	265,200	258,407	240,562	247,220
4	Discharge number of People	258,965	263,028	255,024	239,049	NA
5	Bed Occupancy rate	46	47	46.3	44.2	49.2
6	The average length of stay	5.9	5.7	5.8	5.7	6.1
7	Surgery Number	55,908	54,553	52,086	51,163	50,802

Source: MoH Albania (from the Answer of Questionnaire)

5.3.2 Emergency Medical Services

In 2007, Albania formulated the Strategy of Emergency Medical System Reform in Albania to improve emergency medical service. In this strategy, the following points are described: 1) Emergency medical services, 2) Installation of the standard departments in Regional Hospitals and the emergency departments equipped with drugs and medical devices, 3) Trauma center, 4) National level of emergency medical care, 5) Patients' information management, 6) Ability of health care workers for the emergency medical care, 7) Referral system, and others.

In 2011, to promote the provision quality emergency medical service, the Japanese government provided essential emergency medical equipment to two core medical facilities in Tirana metropolitan area, including the Mother Teresa University Hospital Center, 11 Regional Hospitals, and two District Hospitals[33].

Each Regional Hospital has an Emergency Service Center (ESC) in Albania and plays a central function of 24 hours emergency medical services in the province. Furthermore the District Hospital also receives emergency patients for 24 hours, and provides emergency medical services. The ambulance is dispatched by judging of doctor whether to drive the doctors and nurses on ambulance or to only dispatch an ambulance after receiving the request of the police or patient. At this moment if the doctor judged that the patient cannot be treated at ESC or specialized department of Regional or District Hospital, the patient shall be transferred to tertiary hospital in Tirana.

In the capital of Tirana, emergency system is constructed in a way that differs from the regional areas. There is an Emergency Dispatch Center Tirana in the Tirana receiving 24 hours emergency

[33] JICA, 2009, Preliminary Study Report for emergency medical equipment improvement plan for Albania

patients. This Emergency Dispatch Center Tirana consists of 5 emergency support team including doctor and driver. The ambulance is dispatched for a service area of about 50Km radius based on emergency requests from citizens and police. First aid is performed at the scene, then emergency team transports to the Emergency Dispatch Center Tirana or tertiary hospitals such as Military Hospital Trauma Center, Mother Teresa Hospital and University Maternity Hospital for observation and treatment.

5.3.3 Allocation of Medical Staff

There are about 20,000 medical staff, including doctors, nurses, pharmacists, and dentists in Albania. Compared to the neighboring countries, they tend to be more concentrated in the urban areas.

This situation stems from the history that many experts including doctors had to outflow in the era of political and economic turmoil in 1997 (during this time, one third of health center staff were also lost). In addition, under the influence of the Kosovo conflict of 1999, 4,000 refugees flowed into the country and they were accommodated in hospitals and used them as shelters. As a result, medical facilities had been dilapidated in many provinces. With the background of such a history, even now the situation surrounding health care facilities in rural area has not yet improved completely. The government has been taking various measures to allocate health care workers in rural areas appropriately by improving the working environment and raising their salaries, but suitable allocation has not realized yet. In addition, there is an appropriate-balanced ratio of specialists and general practitioners, which is 10:8 and that is the almost the same proportion. Certain corrections would be required in order to achieve an effective use of medical resources.

In addition, since specialists in urban areas are in the environment where it is easier to obtain training opportunities by the backup of the government and the pharmaceutical companies, they tend to be concentrated in city area. On the contrary, because medical staffs who are engaging in primary care services have only limited opportunities of basic and/or in-service trainings, it has been issue for them to have more opportunities to improve their skills.
Although the most of doctors working in poly clinics or health centers obtained the education as a general practitioner and are not officially classified as specialists, sometime there are cases that they are counted as family doctors due to their long working experiences.
In the same way, even some nurses are also working as a midwife by obtaining many experiences of midwifery. For specialist personnel, special education and training are essential, thus it is necessary to divide the education system (and to bridge each education and training) appropriately.

Since decision makers are not personnel who have expertise in operating medical facilities in the central and local medical facilities in Albania, it has become one of the discussion issues of the health sector reform[34]. The Tirana University School of Medicine has now introduced "Health Policy, Economics and Management Faculty" to produce competent human resources who are to be responsible for medical facility management and operation.

Table 85 Number of Health Care Workers

	Job title	Number	Remarks
1	General Physician	2,000	
2	Specialist	1,685	
3	Dentist	1,035	
4	Pharmacist	1,573	
5	Nurse / Midwife (university graduates)	5,168	Primary health care facility: 6,974 Secondary health care facility: 4,674 Mother Teresa University Hospital Center: 1,680
6	Nurse / Midwife	8,160	
7	Physiotherapist	400	
8	Laboratory Technician	1,800	
9	Radiology Technician	380	

Remarks: Nurse/ midwife: Their curriculums are integrated, so they announce themselves claiming nurse/ midwife by field their each experience.
Source: Albania Ministry of Health (2012)

In 2012, there are approximately 20,000 health care workers in Albania. The number of doctors is 3,685, and among them, there are 2,000 general practitioners, 1,685 specialists, and 108 doctors who are engaged in other research positions. The number of doctor per 10,000 populations is 0.12 and 0.39 for nurse and midwife. In the case of Japan in the statistics of 2008, the number of doctor per 10,000 populations as the national average is 20.63, with the range of 27.29 to 13.55 according to prefectures. In Germany and France, there are 35.0 doctors per 1,000 populations in 2010. It is reported that both numbers of doctors and nurses/midwives are overwhelmingly insufficient in Albania, and they are even fewer in rural areas.

[34] Refer “5.2.2 Health Policy”

Table 86 Changes of Main Health Care Workers in Past Five Years

Health Care Workers	2007	2008	2009	2010	2012
Medical Doctors	1,982	1,925	1,855	1,899	3,685
Dentist	739	791	791	772	8,160
Pharmacist	391	376	387	372	1,570
Nurse	18,674	18,668	19,156	19,047	13,328
Midwife	790	769	765	776	6,203
Laboratory Technician	1,402	1,345	1,403	1,738	2,180

Source: Answers to the questionnaire

Table 87 Number of Doctors, the Number of Doctors per 10,000 Populations, and the Number of Doctors by Region in the Past Five Years

Indicator	2007	2008	2009	2010	2011
Number of Doctors	10,646	10,723	10,784	10,619	10,657
Number of Doctors per 100,000 Population	29.8	30.1	30.3	29.8	29.9
Number of Doctors in Urban Areas	9,418	9,508	9,596	9,439	9,477
Number of Doctors in Urban Areas per 100,000 Population	63.8	64.4	65.0	63.7	63.8
Number of Doctor in Rural Areas	1,228	1,215	1,188	1,180	1,180
Number of Doctors in Rural per 100,000 Population	5.9	5.8	5.7	5.7	5.7

Source: Statistical Series of the Health System in Moldova for year 2011, National Center for Health Management, 2012 (Original source materials are written in Romanian)

5.3.4 Current Situation of Medical Staff Development

(1) Current Situation of Medical Staff Development

The Mother Teresa University Medical Center plays a primary role of training doctor, dentist, pharmacist, nurse/midwife, and clinical laboratory technicians. Two years of school attendance is required to become a doctor of primary health care facilities (family doctor), and six years of it is required to become a general practitioner. By the law which was enacted in 2009, people need to take the national examination and pass it to obtain qualifications of the medical license and the general practitioners (General Medicine, Public Health). To become a specialist, two to six more years' enrollment is required. The development of nurses, midwives, and clinical laboratory technologist is also conducted by public universities, such as the University of Eqerem Cabej of Girokaster and the University of Fan Noli of Korca and other private universities, in addition to the Mother Teresa University Medical Center.

Table 88 Major Training Institute of Health Care Workers, Number of Enrollment and School Duration (2012)

Job title	Training Institute	Number of Enrollment	School Duration
Family Doctors	Mother Teresa University Hospital Center	N/A	2
General Practitioner		240	6
Dentist		120	5
Pharmacist		120	5
Nurse		280	3
Midwife		100	3
Laboratory Technicians		80	3

Source: Answers to the questionnaire

In addition, the in-service training of health care workers is defined by law, and there is a national program of training on a regular basis of each five years for doctors, dentists, and pharmacists.

(2) Challenges in Human Resource Development

One of the challenges of human resource development, it is pointed out that the integrity of contents of main subject between various public and private schools is poor. Shortness of required practical training time in the medical facility for students is also an issue, as well as the in-service training which has been introduced but conducted insufficiently at the moment.[35]

5.3.5 Medical Information Management System

In Albania, the health-related information has been managed by the Office of Technology and Health Information, which is under the jurisdiction of the Ministry of Health. Health-related information contained in the standard form at health facilities of the primary level is sent to the Health Department of the district level. In the standard form that is used for information gathering, diseases are classified on the basis of International Classification of Diseases (ICD-9) that WHO has recommended, and the descriptions of pre- and post-natal health information outpatient health information, outpatient pediatrics health information, and the clinical outcomes is mandatory. Information collected in each district is then to be sent to the Office of Technology and Health Information. University hospitals have been directly providing information to the Office of Technology and Health Information. Information collected in the Office of Technology and Health Information is analyzed to detail by the Institute of Statistics and the Institute of Public Health. The Institute of Public Health is conducting various activities, such as prevention

[35] From the interview with the head of Mother Teresa University Hospital Center

and control of infectious diseases, vaccination, and ensuring the safe drinking water on the basis of the collected information.

Highlighting issues in this field, human resources and development of HMIS in rural areas, lack of necessary equipment and infrastructure are mentioned. [36] For this matter, WHO and the Ministry of Health of Albanian conducted a survey in 2008, and drew up the Action Plan (2010-2015) in 2009.

5.4 Trend of Aid by Other Development Partners

5.4.1 Trends of Other Development Partners in Health Sector

In Albania, the main partners for health were the WB, USAID and WHO. A "Coordination Group Health" is led by USAID and WHO in alternation. In bilateral aid agencies, besides USAID as described above, Swiss Development Cooperation Corporation (SDC) is continuing to support historically in the health sector. In addition, Japan's International Cooperation Agency (JICA) and Italian Development Cooperation Agency contributed especially in the strengthening of emergency medical system. On the bilateral or NGO side, no major player remains with a longer term commitment after the withdrawal of several of them in the recent years. An exception is the Japan International Cooperation Agency (JICA) with a substantial support to the emergency medicine system of the country over the last two years, but the project is now closed.
UN-agencies like UNICEF, UNFPA and FAO are joining the group in a less regular manner. A recently drafted "One UN-program, Development Albania" encompasses a health component, where the respective responsibilities of UN agencies concerned are enumerated under common objectives such as "Outcome 4.3"of"Health insurance is universal and quality, gender sensitive and age appropriate public health services are available to all, including at-risk populations." To achieve this outcome, the UN agencies are aiming at; 1) expansion of medical insurance system (by expanding its services provided, simplify the administrative procedures, providing related Information), 2) improving access to high-quality medical services especially to the people of socially vulnerable, and 3) cooperating with multi-sectors and enhancing the disease prevention effort and health promotion through community participation. GFATM also provided medical equipment for HIV and TB control.
For most actors involved in health, the common denominator of focus in their support is "inadequate health insurance coverage", "inequitable access to health services" and "lack of health literacy." They consider the existing health reform plans of the government as a relevant

[36] Assessment of the health information system in Albania（Curation International Foundation 2008）

and valuable blueprint for progress. Since, however, Albania still has poor capacity and many intrinsic obstacles for implementation, foreign presence, expertise and assistance is essential in the area of health.

As for the characteristics of donors' assistance to Albania in the health sector, the emphasis seems to have been placed on improving the quality and expanding access to health care services. In particular, in bilateral assistance, majority of the programs are for helping the social vulnerable to have access to health services in the primary level first, for capacity building of health workers, for strengthening governance, and for improving the quality of services through assisting the development of health information systems. Therefore, in general, health donors in Albania can be regarded that they are expanding their supports in line with the NSDI 2013-2020, which Albanian government has proposed. On the other hand, as well as bilateral aid agencies, international organizations have been continuously providing variety of supports to achieve MDGs, such as the field of mother and child health, in addition to the supports for the provision of quality health care services to the social vulnerable and the expansion of the medical insurance system, which is prioritized in NSDI. The donors that assist or have an intention to assist the development of medical equipment (i.e. The Swiss government, the World Bank) are also present, and significant biases have not been confirmed in the foreign supports. WHO, however, has pointed out that since Albania has become a middle-income country thus the interests of the donors have been generally reduced recently, and concerned that the resource inputs which are need for some priority areas are missing now.

For a detailed view of individual agency projects, see Table 89.

Table 89　Current Aid Trends of Development Partners in Albania Health Sector

Development Partners	Priority Area of Assistance	Ongoing and the Past Five Years Programs and Projects	Amount of Support	Duration
Swiss Development Cooperation (SDC)	・Health human resource development ・Health infrastructure (Including medical equipment) maintenance *Mainly primary and secondary level health facilities) ・Regional Health Reform Support	・「Support to Health Reform for Inclusive Access & Better Quality of Services」 ・「Professional Development System in the Health Sector Reform」	・CHF10,000,000 (1st Phase) ・CHF10,000,000 (2nd Phase) ・CHF1,835,000 (1st Phase) ・CHF1,730,000 (2nd Phase)	2014-2018 2018-2021 2007-2010 2011-2015

USAID	Health system strengthening	・「Enabling Equitable Health Reform」 ・「Telemedicine and e-Health Program」	・USD 8,600,000 ・USD1,250,000	・2010-2015 ・2009-2013
Italian Development Cooperation	Emergency medical care	「Shkodër Regional Hospital emergency systems strengthening」	USD 1,100,000	2009-2011
World Bank	・Health system strengthening ・Health finance	「Health System Modernization Project」	USD 15,400,000	2006-2010
WHO	Food safety management	「Biennial collaboration WHO-Euro Food Control Institutions」	EUR 2,000,000 (Total)	・2009-2012 (1st Phase) ・2012-2013 (2nd Phase)
UNICEF	Maternal and Child Health	「Equitable Access to MCH services」(Support for the mother and child consultation center)	No data	2012-2016
UNICEF & UN Agencies	Health finance	「Health Financing」 (Analysis of the economic barrier)	No data	2012-2016
UNFPA	・Gender equality ・Reproductive health and rights	No data	No data	2012-2013
WHO, UNICEF, FAO	Child malnutrition (as an effort to achieve MDGs)	「Joint Program: Reducing malnutrition in children」	USD 5,000,000	2010-2013
Global Fund AIDS, TB, Malaria)	・Infectious diseases (HIV/AIDS,TB) ・Health Infrastructure and Medical Equipment(HIV/ AIDS, TB)	・「Scaling-up the National Response to Tuberculosis」 ・「Strengthening Albania's National Response to HIV/AIDS Among Vulnerable Groups」 ・Refurbishment of a reference laboratory ・X-Ray machine, binocular microscopes, a system for testing viral load, pharmaceuticals and medical products, office furniture and IT equipment	・USD 1,263,060 ・USD 5,356,170	・2007-2012 ・2007-2014

Source: Swiss Cooperation, 2012, “Albania Health Sector Assessment”, JICA, 2009 “Albania emergency medical equipment improvement plan (basic design) Report,” Questionnaires

The following are details of the support of major donors;

1) Swiss Cooperation (SDC)

SDC is the most important bilateral donor in the domain health, today and in the past. Last eight years, SDC has supported for developing the health human resources, setting up the accreditation system for continuing medical education (CME) for physicians, dentists and pharmacists. It is planning next four-year (2015-2018) cooperation for Albania based on the assessment survey which was conducted in 2012 (and published in 2013). As for future cooperation, SDC is considering supporting Health Reform for Inclusive Access & Better Quality of Services (Strengthening Supply System on Primary Healthcare).[37]

(1) "Support to Health Reform for Inclusive Access & Better Quality of Services"

(Duration: [1st Phase] April 2014 to December 2018, [2nd Phase] 2018 to 2020, Commitment Amount: CHF10,000,000 for each Phase)

The overall goal of this program is to provide access to high-quality primary and secondary level health services which are managed properly for all citizens, especially socially vulnerable population throughthe training of health workers. In detail, the program seeks to address existing needs by further strengthening the CME mainly in remote regions and by focusing on the group of professional so far underserved at the primary level, and possibly also by providing equipment and infrastructure, as need for them to work in decent conditions. In addition, the program will also support to the newly created School of Health Management and other training institutions in order to be operations fully equipped with the necessary resources and expertise. For the health promotion program, SDC targets not only the major health care workers, but also minority groups and civil society organizations and community to improve their health literacy[38].

(2) "Professional Development System (PDS 2) in the Health Sector Reform"

(Duration: [1st Phase] 2007 to 2010, [2nd Phase] 2011 to 2015, Commitment Amount: [1st Phase] CHF1,835,000 [2nd Phase] CHF1,730,000)

The first phase of this PDS project was successful and contributed to the development of human resources by setting up the accreditation system for the continuing medical education, and allowing the creation of a recertification system and of "National Center for Continuing Education (NCCE)." On the other hand, this new system is now exposed to a rapid environmental change due to the health reform, so the system cannot be regarded as being established yet. Therefore, in the second phase, SDC has been supporting for its functional establishment and sustainability by creating the national accreditation system for continuing medical education

[37] Fujita Planning, 2014, Daily memorandum (Interview with SDC), "Progress study Report of Kosovo and Albania Health Sectors"

[38] "Support to Health Reform for Inclusive Access & Better Quality of Services" Project information sheet provided by SDC

programs for all categories of health professionals and the re-certification system for health professionals to improve the quality of health services.[39]

2) USAID

USAID is one of the bilateral aid agencies, which has been strongly supporting the Albanian health sector. It has prioritized primary health care extension services and reproductive health fields until around 2009, but now their priority has been the health systems strengthening.

(1) "Enabling Equitable Health Reform (EEHR)"

(Duration: 2010 to 2015, Commitment Amount: USD 8,600,000)

USAID's "Enabling Equitable Health Reform (EEHR) project" is a five-year initiative that will increase access to essential health services for the poor and support national health policy reform. Corruption in Albania's health sector is one of the primary barriers to fair and equal access to health services. Due to the high incidence of out-of-pocket payments for health services, Albanian's poor are disadvantage in accessing health services, driving up costs in an already underfunded sector and increasing public health risks. To reduce corruption and improve governance in health sector, changes must be made at the national and regional policy levels. [40]

(2) "Telemedicine and e-Health Program"

(Duration: 2009 to 2013, Commitment Amount: USD 1,250,000)

This program will build Albanian's first National Telemedicine Center and five Regional Telemedicine Centers. It aims to deliver quality health services using ICT, exchange diagnostic and treatment information among national and regional health provides, support research and development, and provide continuing education for Albania's health care professionals. This new program is part of an existing telemedicine network being built in the Balkans based on the successful model of the Kosovo Telemedicine Program established in 2002.[41]

3) World Bank

The World Bank implemented "Health System Modernization Project" in 2006-2010 to achieve Project Development Objectives of: 1) Improve both physical and financial access to and the actual use of high quality primary health care services, with an emphasis on those in poor and underserviced areas as well as to diminish the unnecessary use of secondary and tertiary care facilities, 2) Increase effectiveness of the MoH and Health Infrastructure Institute (HII) in formulating and implementing reforms in provider payment and health system performance, and

[39] "Professional Development System (PDS 2) in the Health Sector Reform", Project information sheet provided by SDC

[40] http://www.usaid.gov/news-information/press-releases/usaid-launches-project-support-health-reforms-albania (Accessed April28,2014)

[41] http://www.usaid.gov/news-information/press-releases/usaid-launches-new-e-health-program (Accessed April28,2014)

3) Improve governance and management in the hospital sector. According to the implementation completion and result report, the project was moderately satisfactory by increasing number of visits per capita per year to PHC center, and by reducing percentage of households who do not seek necessary health care because they cannot afford it and reduced share of household expenditure for primary care services.[42]

The World Bank is considering next four year-assistant programs under the assessment by consultants. The assessment process after several surveys will be finalized by the end of 2014. The target areas for the next four year programs mainly focus on strengthen Health Financing, HIMS and Management of Medical Technology, including with the provision of medical equipment in the country. The initial possible areas of assisting the country should be reconsidered.[43]

[42] World Bank, 2012 "Implementation completion and results report on a credit in the amount of SDR10.7 million to Albania for a health system modernization project", 27-39

[43] Fujita Planning, 2014, Daily memorandum (Interview with World Bank), "Progress study Report of Kosovo and Albania Health Sectors"

Chapter 6

Chapter 6 Survey of Relevant Medical Infrastructure in Albania

6.1 Survey of Relevant Medical Infrastructure

6.1.1 Current Situation of Existing Public Hospitals and Health Centers

In Albania, public hospitals and Health Centers are allocated as Table 90 shows.

Table 90 Health Facility in Albania

Category	Facility Name	Location	Number
The Tertiary Level Health Facilities	Mother Teresa University Hospital Center, University Hospital	Tirana	2
The Secondary Level Health Facilities	Mother Teresa university hospital center, University Hospital, Regional Hospital, District Hospital	Each major city	Regional Hospital : 11 District Hospital : 22
The Primary Level Health Facilities	Polyclinic (only in Tirana) and Health Center	Tirana, major city and village	Polyclinic : 4 Health center : Many

Source: Interview

Analysis of statistical data for the medical facilities of these were available, answers to written questions for some facilities, and was carried out as fieldwork of Table 91.

Table 91 Survey Target

No.	Target Facilities	Category
1	Mother Teresa University Hospital Center	The Secondary and Tertiary Level Health Facility
2	University Hospital	The Secondary and Tertiary Level Health Facility
3	Durras Regional Hospital	The Second Level Health Facility
4	El bassan Regional Hospital	The Second Level Health Facility
5	Vlore Regional Hospital	The Second Level Health Facility
6	Tirana Polyclinic No. 3	The Primary Level Health Facility
7	Kavaje Health Center	The Primary Level health facility

6.1.2 Current Operation and Maintenance System for Medical Facilities/Equipment

(1) Analysis by Statistical Data

In Albania, since the relevant information which is officially collected and published is very limited, thus it was hard to obtain the resources materials that cover the activities of Health Center.

(2) Field Survey of Primary Level Health Facilities

A field survey of two Health Centers was conducted and as a result, the following situation was grasped. Since there was a difference in the available data of both facilities, it was not possible to compare in all aspects.

Tirana Polyclinic No.3 is a particular type of primary care facility in Tirana. There are three this types of clinics of No.1, 2, and 3, and there are the facilities for the patients who were referred from other Health Centers within Tirana City to receive various services, such as medical tests and consultations. In other locations, such diagnosis by specialists and medical tests are to be performed at secondary medical facilities. In Tirana City, however, since its population is large and the fact that Mother Teresa University Medical Center, originally a tertiary level health facility, is serving as a secondary health care facility concurrently, this framework is organized in order to avoid congestion. In Tirana, there are four Polyclinics, and as the primary level medical facilities, these facilities conduct medical tests and specialized outpatient care.

In Health Center, only medical diagnosis and treatment (issuance of prescription) have been carried out. Medical equipment is scarcely used, and medical care has been conducted only by consultancy, palpation, auscultation, and weight and blood pressure tests. Patients who are difficult to carry out treatment with only the primary medical facility will be sent to the secondary medical facilities (In the case of Tirana City, they are to be sent to Polyclinics).

Table 92 Activity of Primary Level Health Facility

Facility Name	Tirana Polyclinic No. 3	Kavaje Health Center
Location	Tirana	Kavaje
Function	Physical and sample test of patient and consultation by specialist (referred by family doctor)	General consultation, prescription, Pri and perinatal care, Newborn child checkup, EPI etc. by family doctor
Staff	117 (Dr. 50)	48 (Dr. 16, Ns. 31, Administrator 1)
Dr.	Specialist	16 doctors are general practitioner. However, 3 of them are under training for pediatric care.

Outpatient	Approx. 800 per day Operating hour : 7:30 - 14:00	Approx. 200 per day Drs. and nurses are working in two shifts (8:00 - 14:40 and 13:20 - 20:00). Outreach service is implemented on this period.
Function	Specialist consultation, various physical test and prescription	General consultation, Pri and perinatal care, Newborn child check, EPI, Patient visit
Equipment	General X-ray, Ultrasound diagnosis apparatus, Endoscopy, Hematology and biochemical analyzer	Weighing scale, Sphygmomanometer etc.

Source: Answers of questionnaires, interviews, observational investigations

Although polyclinics in Tirana owns equipment needed for their activities, some of them are need to be update (general imaging apparatus, such as an endoscope), or to be increased in numbers (ultrasonic diagnostic there are also devices, etc.) to strengthen the facilities' function.

Whole budget of the Health Centers and Polyclinics has been allocated from local governments. Local governments provide both salary and drugs by in-kind, so Health Centers do not perform any budget management. Patients are to pay 100 Lei as a fixed payment for each medical practice, and that money has also been remitted to the local government from the health center.

6.1.3 Current Situation of Existing Public Hospitals and their Existing Medical Equipment

(1) Analysis by Statistical Data

Table 89 shows activities of secondary health care facilities in Albania. As the table indicates it can be observed that 11 Regional Hospitals and 22 District Hospitals have been installed in the country. In the Tirana city, there are 6 tertiary hospitals which also serve as secondary medical facilities. Even though the data of each facility by district have been provided, the Ministry of Health explained that there is a problem with data quality.

Table 93 Activities of Secondary and Tertiary Health Care Facilities (Source: Answers of Questionnaire)

Category R : Regional Hospital D: District Hospital T/R: The third level health facility

No.	C	District	Population (2011by Censes)	Bed number per population	Hospital Number	Departm ent	Bed Number	Hospitalized Patient		Out Patient				Operation Number	Bed Occupancy Rate (%)	Average Length of Stay	Bed turnover
								Total	From other district	Total	From rural area	Under 1 year	Over 60 years				
1	R	Berat	141,944	2.66	1	14	258	9,392	1,436	9,392	3,706	722	1,448	1,703	37.7%	3.78	96
2	D	Kucove			1	4	53	976	22	974	357	19	186	0	32.8%	6.51	56
3	D	Skrapar			2	9	67	464	24	455	141	47	111	0	13.0%	6.87	53
4	R	Diber	140,002	3.63	1	12	295	6,895	1,603	5,901	5,234	330	1,109	533	43.4%	6.77	54
5	D	Bulquize			1	5	65	1,347	0	1,344	476	243	201	0	40.8%	7.18	51
6	D	Mat			1	6	148	3,039	199	3,039	1,606	140	479	523	36.4%	6.48	56
7	R	Durres	262,785	1.77	1	6	340	15,176	2,012	14,984	4,485	744	3,438	3,844	57.3%	4.69	78
8	D	Kruje			1	8	124	2,497	101	2,496	1,179	155	290	308	24.4%	4.42	82
9	R	Elbasan	295,827	3.45	2	13	725	13,752	2,243	13,550	7,007	495	1,853	2,947	52.7%	10.15	36
10	D	Gramsh			1	5	115	3,307	134	3,224	1,989	228	630	395	45.4%	5.77	63
11	D	Librazhd			1	4	158	3,867	229	3,866	3,547	389	806	970	107.9%	16.09	23
12	D	Peqin			1	4	22	210	9	210	65	2	52	0	15.4%	5.88	62
13	R	Fier	310,331	1.46	1	11	421	12,326	2,288	12,130	6,713	790	1,879	2,511	28.9%	3.60	101
14	D	Mallakaster			1	2	32	74	2	74	54	0	7	0	1.1%	1.72	213
15	R	Gjirokaster	72,176	5.26	1	12	184	5,341	1,688	5,323	1,965	395	1,357	755	39.1%	4.92	74
16	D	Permet			1	5	98	972	23	961	304	79	308	0	13.0%	4.78	76
17	D	Tepelene			1	7	98	714	27	706	390	60	148	0	9.4%	4.71	77
18	R	Korce	220,357	3.41	1	15	463	11,207	575	11,049	5,646	692	3,012	1,487	40.2%	6.07	60
19	D	Devoll			1	3	41	1,002	33	1,004	708	85	191	0	32.7%	4.88	75
20	D	Kolonje			1	6	83	650	29	649	353	16	162	95	11.5%	5.35	68
21	D	Pogradec			1	8	165	3,630	245	3,618	2,086	339	260	653	21.2%	3.51	104
22	R	Kukes	85,292	4.36	1	11	236	5,584	1,140	5,538	3,334	222	524	698	42.5%	6.56	56
23	D	Has			1	3	35	552	0	552	359	98	140	0	30.7%	7.11	51
24	D	Tropoje			1	5	101	858	24	859	541	14	188	0	15.5%	6.65	55
25	R	Lezhe	134,027	2.38	1	10	162	6,540	1,757	6,470	2,810	373	1,039	1,305	55.1%	4.98	73
26	D	Lac			1	4	65	1,416	44	1,422	523	190	298	0	39.5%	6.62	55
27	D	Mirdite			1	6	92	1,449	144	1,449	789	90	351	172	30.5%	7.07	52
28	R	Shkoder	215,347	3.03	1	16	568	12,821	1,124	12,094	6,584	402	3,419	2,572	28.8%	4.66	78
29	D	Puke			1	6	85	1,387	26	1,383	664	28	372	76	28.8%	6.44	57
30	R	Vlore	175,640	4.02	2	0	591	15,847	649	15,757	4,571	807	2,590	2,107	55.5%	7.56	48
31	D	Delvine			1	4	30	148	0	148	48	2	61	0	9.4%	6.92	53
32	D	Sarande			1	8	85	3,458	857	3,458	1,134	167	710	477	48.8%	4.38	83
33	T/R	Tirana Mental hospital	749,365	2.92	1	0	30	783	783	783	227	12	0	0	54.9%	7.67	48
34	T/R	Tirana, National trauma center hospital			1	12	214	5,770	0	5,770	0	0	0	2,861	53.2%	7.21	51
35	T/R	Tirana, Mother Teresa University Hospital Center			1	46	1,440	59,593	25,592	61,824	7,453	3,126	16,501	17,029	80.5%	7.10	51
36	T/R	Tirana, University Hospital			1	3	136	3,821	1,989	3,744	1,032	0	1,644	0	78.8%	10.24	36
37	T/R	Tirana, Obstetric and gynecology hospital No. 1			1	3	152	11,771	2,498	11,548	4,073	0	264	3,338	68.0%	3.21	114
38	T/R	Tirana, Obstetric and gynecology hospital No. 2			1	3	132	7,499	2,024	7,499	1,979	0	141	2,459	52.7%	3.39	108
39	D	Kavaje			1	6	86	2,715	211	2,714	1,381	331	421	0	30.7%	3.55	103
Total			2,803,093	2.92			8,195	238,850	51,784	237,961	85,513	11,832	46,590	49,818			

*Beds number per 1,000 population = The number of beds÷ (Population [census 2011] ÷ 1,000) , ** Bed occupancy rate = Total number of days hospitalized ÷(Number of beds ×365 days), ** Average length of stay = Total number of days ÷ Total number of inpatients, ** Beds turnover = 365 days÷ Average length of stay (** Study Team calculated), Source: Ministry of Health document station provides hospital (2012)

As for the data in Table 93, the following analysis was conducted;

- The number of beds per 1,000 populations: 1.46 to 4.36 by region. (National average: 2.92)
- District Hospitals which can perform surgery: 9 places (40.9% of the total)
- Regional Hospitals with beds occupancy rate of more than 50%: 4 places (36.4% of the total)
- District Hospitals with beds occupancy rate of more than 50%: 1 place (4.5% of the total)

The Ministry of Health has been pointed out the problem that patients are concentrated in tertiary hospitals. Although there are many patients there if compared to that of hospitals in rural areas, judging from their number of staff and beds occupancy rate, it is presumed that tertiary hospitals are still not in the extreme congestion which makes their operation difficult. On the other hand, utilization rate of the county hospital is very low.

Following reasons below are assumed for this situation. The details of 2nd level hospital will be mentioned in (2) Field Survey of Secondary Level Health Facilities.

- Poor function of rural hospital (Aging equipment, lack of necessary equipment for providing modern medical services) lack of skill of health care workers, and lack of facility management capacity are known to residents. Thus among residents who hate this situation, if it is possible to go to Tirana, people can be referred to a tertiary care facility of Tirana by negotiating with Health Center. (Bypass phenomenon)
- There is no budget allocated to local hospitals to support the improvements of their function.

It is necessary to take measures to improve above-mentioned conditions.

(2) Field Survey of Secondary Level Health Facilities

In this study, in order to confirm the situation grasp of the medical field, a field survey of three regional hospitals was conducted, and the results were compiled. Detailed data are provided from Elbassan Regional Hospital and Durras Regional Hospital. An analysis of survey findings of each facility are as followings. The Survey Team couldn't visit Vlore (southwestern and coastal areas), Dibra (northeastern part), and Korce (southeastern) in this field survey, located in geographically important regions of Albania, to be functioned as a hub hospital in each region[44].

[44] The Minister of Health explained about the plan 3 region to be functioned as hub hospital in the future.

Table 94 Activity of Secondary Level Health Facilities (Three Regional Hospitals)

Facility Name	Durres Regional Hospital	Elbassan Regional Hospital	Vlora Regional Hospital
Location	Durres	Elbassan	Vlore
Function	Second level health care (Specialist care for 4 major subject) and Policlinic for outpatient	Second level health care (Specialist care for 4 major subject) and Policlinic for outpatient	Second level health care (Specialist care for 4 major subject) and Policlinic for outpatient
Bed Number	340	383	120 of 340 is operated
Staff	701 (Dr. 139, Ns. 245)	449 (Dr. 74, Ns. 263, Midwife 26)	-
Hospitalized Patients	15,782	11,574	Delivery 1,350
Operation Rooms	3	5 (3 for surgery and 2 for obstetrics and gynecology)	-
Major Diseases	Injury, Cardiovascular diseases, Pulmonary diseases, Gastro intestinal diseases, Viral diseases, Nerve diseases, Diabetes etc.	Gastrointestinal diseases, Pulmonary diseases, Cardiovascular diseases, Urological diseases, Cerebral nerve diseases, Bone fracture, injury and poisoning, Endocrine disorder etc.	-
Equipment	Radiology (MRI, CT, General X-ray, Endoscopy, Ultrasound diagnostic apparatus), Operation room equipment, ICU equipment etc.	Radiology (CT, General X-ray, Endoscopy, Ultrasound diagnostic apparatus), Operation room equipment, ICU equipment etc.	Radiology (MRI, CT, General X-ray, Ultrasound diagnostic apparatus), Operation room equipment, ICU equipment etc.
Equipment Maintenance	CE 1 (work with facility technicians)	Engineer 2（1 for medical equipment and 1 for facility) There are some more technicians.	-

Source: Answers of questionnaires, interviews, observational investigations

(a) Durres Regional Hospital

Durres Regional Hospital is located in Durres Region which has the second largest population in

Albania. Since 2000, this facility has become a pilot project facility of medical insurance fund, so its hospital name is listed in the expenditure list of medical insurance fund. For other hospitals, the government budget has been allocated via the medical insurance fund. Activities of this facility are shown in Table 95 to Table 101.

Table 95 Activity of Durres Regional Hospital

Activities	2009	2010	2011	2012	2013
Bed Number	340	340	340	340	340
Hospitalized Patient Number	13,007	14,226	14,816	15,176	15,782
Outpatient	48.7%	55.9%	56.7%	58.1%	58.2%
Bed Occupancy Rate (%)	4.65	4.88	4.75	4.75	4.58
Average Length of Stay (Day)	3,903	3,916	3,921	3,844	3,863
Annual Operation Number	2,697	2,784	2,945	2,851	2,851
Annual Delivery Number	98	85	86	93	111

Source: Answers to questionnaire

Table 96 Major Diseases Treated in Durres Regional Hospital (In-Patient)

No.	Disease Name	Number
1	Injury	1,635
2	Cardiovascular diseases	1,344
3	Pulmonary diseases	1,114
4	Gastrointestinal diseases	1,056
5	Viral diseases	495
6	Nerve diseases	438
7	Diabetes	138
8	Others	193

Table 97 Major Cause of Death in Durres Regional Hospital

No.	Disease Name	Number
1	Cardiovascular diseases	58
2	Injury	5
3	Cerebral Nerve diseases	9

Source: Answers to questionnaire

Table 98 Number of Performed Tests in Durres Regional Hospital

Test Category	2009	2010	2011	2012	2013
MRI	0	0	0	634	909
CT	0	0	0	2,910	3,545
X-ray	12,113	18,589	18,077	17,606	17,460
ECG	14,859	22,168	23,706	17,339	25,335
Ultrasonography	16,845	18,397	18,496	19,893	22,475
Endoscopy	530	614	750	686	664
Blood and Urine etc.	190,734	203,205	209,215	250,355	213,311

Source: Answers to questionnaire

Durres Regional Hospital is a large-scale facility with 340 beds. As a department, in addition to departments of internal medicine, surgery, obstetrics and gynecology, and pediatrics which are essential for Regional Hospitals, there are also departments of otorhinolaryngology and rheumatism. Other than that, in addition to the emergency department, it has also various inspection functions (diagnostic imaging, blood tests), and a pharmacy as well. As for operating room, there are 7 rooms for general surgery and 2 rooms for obstetrics and gynecology treatment. The average number of operations is approximately 15 rounds per day. Normal delivery number is 8 per day in average, so utilization rate is high. The average length of stay is 5 days or less, and it is within an international average. CT examination number, however, seems to be too many for single CT machine. Number of ultrasound tests in the facility which is more than 80 per day in average is also fairly high. Beds occupancy rate, however, does not reach 60%, and operation rate is rather low. Therefore the facility's scale with sickbeds may be too large.

Except for emergency patients, patients who visit are referred from family doctors by Referral system. The patients, however, who are transferred to Tirana from Durres Regional Hospital are few, and it was only 90 people in 2013. This is because family doctors are judging patients' conditions and treatments available in a Regional Hospital level, and making a decision of a suitable referral medical facility for the patients.

Budget situation:
Budget of Durres Regional Hospital is obtained from the medical insurance fund, unlike other hospitals.

Table 99 Revenue of Durres Regional Hospital (Lek)

Revenue	2009	2010	2011	2012	2013	Ratio on 2013 (%)
Participation Fee	288,465	329,630	270,961	246,405	275,484	3.7%
Health Insurance	6,260,000	6,540,000	6,695,000	6,850,000	7,130,620	96.0%
Others	30,602	25'528	34,818	19,165	20,047	0.3%
Total	6,579,067	6,895,458	7,000,779	7,115,570	7,426,151	100.0%

Source: Answer to questionnaire

Table 100 Expenditure of Durres Regional Hospital (Lek)

Expenditure	2011	2012	2013	Ratio on 2013 (%)
Salaries	3,739,854	3,885,165	3,952,132	54.1%
Medicine	1,470,768	1,309,878	1,283,198	17.6%
Equipment	9,957	41,063	18,562	0.3%
Maintenance	43,387	91,572	100,209	1.4%
Reagent and Consumables	35,964	48,650	48,692	0.7%
Others	1,999,087	1,590,246	1,899,496	26.0%
Total	7,299,017	6,966,574	7,302,289	100.0%

Source: Answer to questionnaire

The same trend has been observed on income and expenditure. When considering the ratio of each item in 2013, the major part of the income is obtained from the medical insurance fund. On the other hand, labor costs as fixed cost accounts for more than half of the total expenditure. It means that more than half of the budget becomes fixed cost with no degree of freedom, so it is resulting in reduced freedom of budget management (adjustment range). Thus it would invite an unfavorable situation to management. It can be a difficult situation to manage the limited and fluctuating budget for drugs, consumables, maintenance fees and others.

Staff:

Number of staff and average salary are shown in Table 101.

Table 101 Staff Number and Average Monthly Salary of Durres Regional Hospital

Category	Number	Average Monthly Salary (Lek)
Specialist	139	69,500
Pharmacist	3	59,000
Nurse	245	40,500
Assistant Nurse	3	35,200
Midwife	63	41,000
Laboratory Technician	40	40,100
Medical Equipment Maintenance	1	67,000
Administrator	1	108,000
Others	206	40,300
Total	701	

Source: Answer to questionnaire

General Practitioners are not dispatched, so all doctors are specialists. Fairly large number of people (701) is allocated, given the number of beds (340). In this facility, the salary of office manager whose duty is hospital management is the highest.

Medical equipment and facilities:

Currently, Durres Regional Hospital is under construction of its pediatric ward by the budget from the Ministry of Health. After construction, a pediatric ward will be translated to this new ward.

Even though the facility that the study team visited seemed to be an old building, maintenance and repair has been done properly including their equipment, thus it is assumed there is no problem in practice of medical examination. As for about the medical equipment of Durres Regional Hospital, inventory list is available which was organized as part of the inventory survey that has been carried out in the nationwide currently. Although equipment of cardiology and emergency departments (About half the required number of patients monitoring equipment, ECG, Defibrillator) were seemed to have been updated within five years, the equipment for General ICU and pediatric departments (Patient monitoring equipment, electrocardiographs, defibrillators, nebulizers and others) have been used for more than 10 years, and need to be updated. Also in operating rooms, there were much old equipment (Shadowless lamp, operating table, electric knife, patient monitoring equipment, anesthesia machine, aspirator, etc.) which have been used more than 10 years after production and need to be updated.

Maintenance of medical equipment has been carried out by two technicians, with one CE (Clinical engineers) who acts as a leader. For large equipment, maintenance contract has been made with an external agency. At the time of this survey, CT was out of order and awaiting for a repair. Maintenance of facilities is carried out by three engineers and 30 technicians.

(b) Elbassan Regional Hospital

Elbassan Regional Hospital is located in the south of Tirana City, in Tirana region. Activities of the facility are shown from Table 102 to Table 108.

Table 102 Activity of Elbassan Regional Hospital

Activities	2010	2011	2012	2013
Bed Number	383	383	383	383
Hospitalized Patients Number	11,574	12,483	12,934	12,392
Outpatients	24,477	20,548	24,184	14,947
Bed Occupancy Rate (%)	36.6%	37.9%	34.6%	36.4%
Average Length of Stay (Day/s)	4.4	4.1	4.1	3.9
Annual Operation Number	2,723	3,195	2,947	2,767
Annual Delivery Number	2,201	2,180	2,318	2,234
Annual Death Rate (%)	58	37	59	53

Source: Answers to questioner

Table 103 Major Diseases Treated in Elbassan Regional Hospital

No.	Name of Diseases	Number	No.	Name of Diseases	Number
1	Gastrointestinal diseases	2,025	6	Bone fracture	701
2	Pulmonary diseases	1,643	7	Injury and poisoning	526
3	Cardiovascular diseases	1,579	8	Endocrine diseases	325
4	Urology diseases	1,048	9	Infection diseases	272
5	Cerebral nerve diseases	792	10	Tumor	199

Source: Answers to questioner

Table 104 Number of Performed Tests of Elbassan Regional Hospital

Type of test	2010	2011	2012	2013
CT	-	-	664	1,476
X-ray	-	-	-	-
ECG	-	-	-	-
Ultrasonography	-	-	-	-
Endoscopy	-	-	-	-
Blood and Urine etc.	26,532	76,305	79,934	87,036

Remarks: Data of X-ray, ECG, USG, and Endoscopy were not provided even though the facility owns that equipment.
Source: Answers to questioner

Table 105 Referred Patients to Elbassan Regional Hospital

Year	2010	2012	2012	2013
Referred Patients	1,221	1,344	1,455	1,347

Source: Answers to questioner

Elbassan Regional Hospital is a large-scale facility with 383 beds. In addition to departments of internal medicine, surgery, obstetrics and gynecology, and pediatrics which are essential for Regional Hospitals, there are also departments of otorhinolaryngology and rheumatism. Other than that, in addition to the emergency department, it has also various inspection functions (diagnostic imaging, blood tests), and a pharmacy as well. As for operating room, there are 3 rooms for general surgery and 1 room for obstetrics and gynecology treatment. The average number of operations is approximately 7 rounds per day. Normal delivery number is 6 per day in average, so utilization rate is high. The average length of stay is 4 days, and it is within an international average. Beds occupancy rate of annual average, however, is 36%, so operation rate is quite low. Therefore, the facility's sickbed scale may be too large. In 2013, 166 patients were transferred to Mother Teresa University Medical Center.

Budget Situation:

The whole budget of the facility is allocated from the Ministry of Health.

Table 106 Revenue of Elbassan Regional Hospital (Million Lek)

Revenue	2009	2010	2011	2012	2013
Participation Fee	-	-	-	-	-
Medical Insurance	-	-	172	182	182
Others	-	-	-	-	-
Total	-	-	172	182	182

Source: Answers to questioner

Table 107　Expenditure of Elbassan Regional Hospital (Million Lek)

Expenditure	2012	2013
Salary	-	-
Medicine	40	45
Equipment	-	-
Maintenance	1.5	1.6
Reagent	1.4	1.3
Consumables	14	15
Consumable for Dialysis	36	37
Total	92.9	99.9

Source: Answers to questioner

This is likely that this data is partial and the data of expenditure for salaries which is expected to be the biggest proportion is not described. Thus the difference between the revenue and expenditure would be the salary amount.

The number of staff and average salary are shown in Table 108.

Table 108　Number of Staff and Average Monthly Salary of Elbassan Regional Hospital

Category	Number	Average monthly salary（Lek）
Emergency Specialist	6	87,000
Specialist	68	71,000
Assistant Pharmacist	4	39,500
Nurse	263	42,000
Assistant Nurse	-	-
Midwife	26	43,600
Laboratory Technician	32	43,000
Medical Equipment Maintenance	-	-
Head of Administrative Dept.	10	65,000
Head Dr. of Each Department	17	78,900
Chief Nurse and Chief Laboratory	23	47,000
Total	449	

Source: Answers to questioner

Given the number of beds which is 383, it is believed that the appropriate number of people is being admitted. An occupancy rate of beds, however, is low, thus workloads of each staff are considered fairly light.

Medical Equipment and Facilities:

In 2013, Elbassan Regional Hospital completed its relocation to the new ward which was constructed from the Australian loan. In this new ward, departments of surgical diagnosis and treatment, pediatric, and obstetrics and gynecology are situated. There is a department of internal medicine in the old main building, and in a separated building, there is an emergency department, a radiology department, and laboratory. Except for the new ward, each facility is quite old. An existing equipment list has been provided, but it was insufficient in contents without details of actual conditions of equipment. Medical equipment in new building (operating room, ICU, Equipment for obstetrics and gynecology), and CT are introduced or updated in accordance with the construction of the building, but equipment of the old building (biochemical analyzers, analytical instrument such as a blood cell counter, general imaging device, and ultrasonic diagnostic apparatus in laboratory) is old and needs to be updated.

Management of facilities is carried out by four staffs who are working under one mechanical engineer. Maintenance of medical devices is performed by four technicians who are working under one CE (Clinical Engineer). Maintenance contract with the manufacturer agency is made for a CT device.

(3) Field Survey of Tertiary Care Facilities

Tertiary care facilities exist only in Tirana city. In addition to Mother Teresa University Medical Center as the main tertiary facilities, the respiratory department of a university hospital also has that function. University Hospital used to be a specialized hospital for respiratory disease, which was called as “Pulmonary Diseases Hospital” in the past. Now the hospital was named as “University Hospital,” but it is not belong to any university and just in general provides medical education (only pulmonology) in cooperation with public and private universities and medical services. Detailed data of University Hospital was not provided.

Table 109 Activity of Tertiary Level Health Facility

Facility Name	Mother Teresa University Hospital Center	University Hospital
Location	Tirana	Tirana
Number of Bed	1,450	300
Department	48 departments	Pulmonary, Medicak, Gastrointestinal, Cardiovascular etc.
Staff	2,772 (Dr. 500, Ns. 1,170)	-
Hospitalized Patients.	44,671 per year	-

Function	The third level health facility except pulmonary diseases and the second level hospital for Tirana.	The third level health facility for pulmonary diseases and the second level hospital for Tirana.
Equipment	Angiography 2, MRI 2, CT 3 etc. Equipment is fulfilled. However, some of them are obsoleted and replacement is required.	Angiography for cardiology 1, CT 1 etc. Equipment is fulfilled. However, some of them are obsoleted and replacement is required.
Medical Equipment Maintenance	7 Maintenance contract is made for large scale equipment.	-

Tertiary care facilities exist only in Tirana city. As a result, patients trend not to trust local secondary health care facilities (in fact, medical services there are limited) and visit a tertiary care facility instead. Thus Mother Teresa University Medical Center is said to be very crowded. In this time of survey visit, the facility was actually more crowded than regional hospital. In Mother Teresa University Medical Center, 1450 beds were divided into buildings of each department within its wide site area. In addition to that, two trauma hospitals and two mother and child hospitals are located at distant places from the center. From such building allocation, it might be difficult to carry out various types of management in this center.

University Hospital was originally a pulmonologist hospital. The hospital's function has now been expanded as a secondary hospital in Tirana city. Renovation of old building has been proceeded by the Ministry of Health budget, and once completed, many departments are to be transferred to this renovated building. The hospital facilities currently being used would be utilized as a specialized outpatient ward to enhance the function of secondary medical facility.

(a) Mother Teresa University Medical Center

Mother Teresa University Hospital Center is the largest hospital in Albania, and is the hospital located at the top of the referral system of the whole country, as well as being one of the secondary hospitals of Tirana City which has the largest population. The Center has 5 independent hospitals, facilities and functions for carrying out management and medical tests, maternity hospitals (2 places) within the site, and a trauma hospital (1 places) outside. By divided into each of these facilities, this huge hospital is providing various medical services with 64 medical departments and 30 operating rooms.

Activities of the property are shown from Table 110 to Table 116.

Table 110 Activities of Mother Teresa University Hospital Center

Category	2009	2010	2011	2012	2013 (up to August)
Bed Number	1,450	1,450	1,450	1,450	1,450
Hospitalized Patients Number	60,065	61,303	59,614	64,462	44,671
Outpatient	-	78,798	70,366	80,622	98,041
Bed Occupancy Rate (%)	77.2%	79.9%	76.6%	80.3%	54.0%
Average Length of Stay (Day)	6.8	6.9	6.8	6.6	6.4
Annual Operation Number	20,378	19,414	18,571	18,695	12,510
Annual Delivery Number	732	715	779	879	618

Source: Answers to questioner

Table 111 Number of Beds in Mother Teresa University Hospital Center

Facility Number	Department	Unit	Number
Hospital 1	Cardiology	Clinic 1	49
Hospital 1	Cardiology	Clinic 2	47
Hospital 1	Cardiology	Reanimation	19
Hospital 1	Hematology	Hematology	34
Hospital 1	Gastropathology	Gastropathology	50
Hospital 1	Endocriminology	Endocriminology	33
Hospital 1	Hypertension	Hypertension	40
Hospital 1	Neprology	Neprology	36
Hospital 1	Reumatology	Reumatology	25
Hospital 1	Allergy	Allergy	22
Hospital 1	Allergy	Opthalmology	18
Hospital 1	Allergy	Day ward	4
Hospital 1	ENT	Pavilion 1	20
Hospital 1	ENT	Day ward	4
Hospital 1	Stomatology	Stomatology	10
Hospital 1	Stomatology	Day ward	2
Hospital 1	Dermatology	Dermatology	40
Hospital 2	General surgery	Clinic 1	30
Hospital 2	General surgery	Clinic 2	45

Hospital 2	General surgery	Clinic 3	50
Hospital 2	Plastic surgery	Clinic 1	35
Hospital 2	Angiology	Clinic 1	20
Hospital 2	Cardiac surgery	Clinic 1	30
Hospital 2	ICU	Reanimation	12
Hospital 2	Orthopedeic	Orthopedeic	70
Hospital 3	ICU	Intensive Care	15
Hospital 3	Rehabilitation	Rehabilitation	5
Hospital 3	Special Pediatric No.1	Allergy	35
Hospital 3	Special Pediatric No.1	TB	6
Hospital 3	Special Pediatric No.1	Cardiac and Reumatology	14
Hospital 3	Hematology	Hematology	23
Hospital 3	Special Pediatric No.2	Gastroentelogy	10
Hospital 3	Special Pediatric No.2	Endocriminology	10
Hospital 3	Special Pediatric No.2	Nephrology	10
Hospital 3	Special Pediatric No.2	Neurology	10
Hospital 3	Surgery	Pediatric Surgery	20
Hospital 3	General Pediatric	Pavilion 10	27
Hospital 3	General Pediatric	Pavilion 7	13
Hospital 3	Pediatric Infection	Pavilion 8 and 11	45
Hospital 4	Infection	Floor 1	25
Hospital 4	Infection	Floor 2	25
Hospital 4	Infection	Floor 3	25
Hospital 4	Infection	Reanimation	5
Hospital 5	Neurology	Floor 3	30
Hospital 5	Neurology	Floor 4	31
Hospital 5	Neurology	Reanimation	14
Hospital 5	Psychiatric	Urgent Male	13
Hospital 5	Psychiatric	Urgent Female	7
Hospital 5	Psychiatric	Man	25
Hospital 5	Psychiatric	Female	25
Hospital 5	Psychiatric	Pediatric	20
Hospital 5	Psychiatric	Chronic	15
Hospital 5	Neurosurgery	Floor 3	16
Hospital 5	Neurosurgery	Floor 4	16
Hospital 5	Neurosurgery	Reanimation	8

Hospital 5	Toxicology and Alchology	Toxicology	13
Hospital 5	Toxicology and Alchology	Alchology	8
Oncology	Oncology	Surgery	22
Oncology	Oncology	Gynecology	18
Oncology	Oncology	Criteria	2
Oncology	Oncology	Chemotherapy	19
Oncology	Oncology	Radiation Therapy	44
Oncology	Oncology	Day ward	6
Internal Pavilion	Internal Pavilion	Intermediate Pavilion	30

Source: Answers to questioner

Table 112 Major Diseases Treated in Mother Teresa University Hospital

No.	Name of Diseases	Number
1	Injury	1,635
2	Cardiovascular diseases	1,344
3	Pulmonary diseases	1,114
4	Gastrointestinal diseases	1,056
5	Viral diseases	495
6	Nerve diseases	438
7	Others	193
8	Diabetes and its related diseases	138

Source: Answers to questioner

Table 113 Number of Performed Tests in Mother Teresa University Hospital

	Performed test	2013
1	MRI	10,043
2	CT	21,924
3	X-ray	46,174
4	ECG	-
5	Ultrasonography	-
6	Endoscopy	-
7	Blood and Urine etc.	1,796,364

Remarks: Data of ECG, USG, and Endoscopy were not provided even though the facility owns that equipment.
Source: Answers to questioner

As the top referral hospital in Albania, Mother Teresa University Hospital is a huge facility with 1,450 beds. In the facility, in average, 50 or more surgical operations, 27 or more MRI examinations, and 60 or more CT examinations have been conducted per day. Beds occupancy rate is over 80 % in 2012. Leading cause of death was not reported, but, chronic disease is often found as a major disease. Since the absent data Gynecology related data, it can be seen that the data of three hospitals in the off-site are not included in this provided data.

Budget Situation:

Budget of the facility is allocated by the Ministry of Health as other hospitals.

Table 114 Revenue of Mother Teresa University Hospital (Thousand Lek)

Revenue	2009	2010	2011	2012	2013	Ratio on 2013 (%)
Budget from MoH	4,080,500	4,339,720	4,601,000	4,749,479	5,227,844	96.7%
Others	870,946	500,733	298,959	392,465	173,778	0.3%
Total	4,951,446	4,840,453	4,899,959	5,141,944	5,401,622	100.0%

Source: Answers to questioner

Table 115 Expenditure of Mother Teresa University Hospital (Thousand Lek)

Expenditure	2009	2010	2011	2012	2013	Ratio on 2013 (%)
Salary	1,015,749	1,405,626	1,526,223	1,576,858	1,608,395	46.5%
Medicine	1,220,062	1,608,629	1,361,984	1,296,712	1,603,358	46.4%
Equipment	-	-	-	-	-	0%
Maintenance, Reagent and Consumables etc.	66,532	99,985	133,595	163,847	245,178	7.1%
Total	2,302,343	3,114,240	3,021,802	3,037,417	3,456,931	100.0%

Source: Answers to questioner

In comparison to other facilities, huge budget is allocated to the facility. Medical equipment is categorized as a direct investment by the Ministry of Health, so it is not recorded on the hospital's budget. In Mother Teresa University Medical Center, the proportion of salary expenditure does not exceed 50%, which is the same ratio as the drug proportion, and that means degrees of freedom is secured for its management.

Human Resources and Salaries:

The number of staff and the average salary are shown in Table 116.

Table 116 Staff number and average monthly salary of Mother Teresa University Hospital Center

No	Category	Number	Average Monthly Salary (Lek)
1	Specialist	500	68,620
2	Pharmacist	24	71,700
3	Nurse	1,170	44,600
4	Laboratory Technician	4	43,665
5	Medical Equipment Maintenance Technician	4	72,500
6	Administration Staff	97	55,000
7	Others	973	40,000
	Total	2,772	

Source: Answers to questioner

It would be reasonable to say that the number of hospital staff is quite enough, given the situation of 2,771 staff for 1,450 beds. The situation suggests that the number of employees has become many, because as a university hospital, the facility has also been taking in teachers and trained staff.

Medical Equipment and Facilities:

Since numerous facilities are scattered, it was a difficult to grasp the whole situation in this survey. Thus by investigating some of the departments, equipment situation was confirmed. By supported by the loan of the European Bank of last year, new facilities were built and procurement of related equipment has also been carried out for the emergency center. An angiography device is not running yet, and it is still under preparation. MRI, CT, and laboratory are already running, and patients have been accepted for the tests. CT and ICU in the tumor hospital were also checked. Though these equipment and facilities and not new, they are at fairly sufficient level and have been utilized enough. Therefore from these studies, it is observed that the maintenance condition is good in the most of the facilities, and at the moment, there would be less demand for infrastructures.

6.1.4 Maintenance Management System of Medical Facilities and Medical Equipment

In public hospitals of Albania, human resources for maintenance medical facilities and medical

equipment are relatively substantial. For facility management, engineers of IT or mechanical system, and for medical equipment, CEs (Clinical Engineer) who are educated in graduate school, or technicians of electric system are allocated, have been conducting maintenance activities at each hospital. For large equipment such as CT and MRI that are difficult to be repaired at facility level, the facility has a maintenance contract with the manufacturer's agent. There is National Center for Biomedical Engineering in the Ministry of Health, for equipment that is difficult to be repaired at each hospital level for assistance.

Currently, maintenance performed at each hospital is only repair work, so preventive maintenance check has not been carried out so much. In addition, the available equipment list is only the data of around 2007, the latest situation of equipment of each medical facility is not fully captured. In order to improve this situation, National Center for Biomedical Engineering is planning to carry out certain activities. Currently, it has requested each hospital to submit a list of existing equipment in order to grasp the situation of medical equipment across the country. It is expected that on the basis of the existing equipment list, followed by analysis of equipment status, the management for medical equipment is to be strengthen by creating preventive maintenance inspection system, an investment plan, and improvement of capacity utilization. It is also planned to develop various laws and regulations as well as guidelines, and to revise National Policy for Management of Medical Devices in Albania, which has been created in 2007, to carry out the plan.

Now, as part of actions, it is also considered to change the affiliated organization of medical equipment maintenance technicians from each hospital to the National Biomedical Engineering Center in the future. In this survey, the technical cooperation for these activities was proposed.

6.1.5 Private Hospitals

In Albania, many private hospitals have been established mainly in Tirana. Small ones have been established also in some local cities. The study team tried door-to-door survey to several those hospitals, but was not able to be accepted due to procedural issues. From various resources, large scale private hospitals in Albania have been identified as Table 117 shows.

Table 117 Private Hospital in Albania

Private hospital name	Web	System	Department	Large equipment name	Bed Number	ICU	Operation Room	Dialysis
American Hospital	http://www.spitaliamerikan.com/	Group hospital established at Tirana 2, Durras 1, Fier 1 and Prishtina 1.	Medical, Surgery, Pediatric, Obstetrics and gynecology, Emergency etc.	Ultrasound diagnostic apparatus, MRI, CT, Endoscopy, Blood analyzer, Ambulance etc.	Equipped	Equipped	Equipped	Equipped
Hygeia Hospital	http://www.hygeia.al/	Established on 2007 by private Greek investment.	Medical, Surgery, Pediatric, Obstetrics and gynecology, Emergency etc.	Ultrasound diagnostic apparatus, MRI, CT, Bone density analyzer, Cardiac ultrasound diagnostic apparatus, Endoscopy, Blood analyzer, Ambulance etc.	94	General 16, NICU 8	General 9, Obstetrics and gynecology 5	10
German Hospital Tirana	http://www.spitaligjerman.com/	Established by private German investment and German staff. German technology is used.	Medical, Surgery, Pediatric, Obstetrics and gynecology, Emergency etc.	Ultrasound diagnostic apparatus, MRI, CT, Blood analyzer, Ambulance etc.	Equipped	Equipped	Equipped	Equipped
Kompleksi Spitalor Universitar Zoja e Keshillit te Mire	http://www.unizkm.al/	Hospital for University Katolic	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown
American Medical Surgical Center （AMSC）	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown

6.1.6 Medical infrastructure in Accordance with EU Standards

Currently, it is required to obtain a CE mark (mark given to those products meet the criteria of all EU Member States) in principle for all the medical equipment in Albania. This is because there is an intention to try to comply with the provisions of the EU. However, this principle is required only for the time of a bid of each medical device, and it is not defined by the laws and regulations at the moment. It is expected that an introduction of the CE mark into laws and guidelines, which National Biomedical Engineers Center is to develop in the future, would be discussed. There was also an explanation that this rule may be defined by Medical Store, which is a subordinate agency of the Ministry of Health and procures and distributes all medicines of public health facilities and some portions of medical equipment.

6.1.7 Assistance Trends in International Organizations / Other Donors in Accordance with Medical Infrastructure

Trends in international aid agency has been analyzed for separately in this report, but as for medical infrastructure, loan by Austria, which has been carried out until last year, has been implemented in a large-scale. Loan by the World Bank are also planned next year. In the plan, the support of the hardware side of the health information system seems to be included, but it has not yet decided as to whether medical equipment may or may not be included.

6.1.8 Trends in the Private Sector

No Japanese companies doing business in Albania. Some of Japanese medical equipment manufacturer are selling products and providing related services by setting their agencies through their subsidiaries in Europe. These agencies has become a jurisdiction of local subsidiaries in the Europe of the manufacturer, thus Japanese manufacturers do not often grab sufficient information from them. European medical equipment manufacturers are also set an agency and, they are more active in promotion and marketing.

6.1.9 Development Status of Related Infrastructure

Although in the past, extreme voltage drops were going on in the winter due to a lack of power generation capacity and defected power grids, the current situation is greatly

improved thanks to the improvement of power plants and a transmission network which was supported by Japanese yen loan. In the urban areas, a water supply and drainage system has been also developed, so the there is no issue in the management of hospitals.

6.2 Analysis of the Priority Ranking of Medical Infrastructure Based on the Survey Results

(1) Secondary Health Care Facilities

For secondary hospitals, demands for medical infrastructure are different depend on each hospital, but since there are demands for upgrading from any hospital, it is necessary to consider the priority of each hospital. Furthermore, considering the current activities of each hospital, it is also necessary to reduce its function for modifying its system more effectively as to suit the actual demands of services in each region. In most of cases, facility management is determined by the national budget, so in general, there would be more needs in supports of medical equipment management than those of facility management. In addition, there is a plan to downgrade District Hospitals with low occupancy rate to the Day-care centers that mainly provides emergency services, thus needs for procurement and renewal of medical equipment is high to adjust to this feature changes.

Table 118 Necessary Equipment for Regional Hospital

Department	Major Equipment
Radiology	MRI, CT, Fluoroscopy, General X-ray, CR unit, Laser imager, Ultrasound diagnostic apparatus (General and cardiac), etc.
Endoscopy	Video gastroscope, Video colonoscope, Video camera set, etc.
Laboratory	Hematology analyzer, Biochemical analyzer, Electrolyte analyzer, Centrifuge, etc.
Dental	Operation light, Operation table, Electrosurgical unit, Anesthesia, Patient monitor, Suction unit, etc.
Emergency	Patient monitor, Suction unit, Ventilator, ICU bed, Infusion pump, Syringe pump, etc.
Radiology	Dental unit, Autoclave, etc.
Endoscopy	ECG, Patient monitor, Oxygen inhalation set, Resuscitator, etc.

Table 119 Necessary Equipment for District Hospitals

Department	Major equipment
Radiology	General X-ray, CR unit, Laser imager, Ultrasound diagnostic apparatus (General and cardiac), etc.
Endoscopy	Video gastroscope, Video colonoscope, Camera unit, etc.
Laboratory	Hematology analyzer, Biochemical analyzer, Electrolyte analyzer, Centrifuge, etc.
Dental	Dental unit, Autoclave, etc.
Emergency	ECG, Patient monitor, Oxygen inhalation set, Resuscitator, etc.

Table 120 Day-care Center

Department	Major equipment
Radiology	General X-ray unit, CR unit, Laser imager, Ultrasound diagnostic apparatus (General), etc.
Laboratory	Hematology analyzer, Biochemical analyzer, Electrolyte analyzer, Centrifuge, etc.
Dental	Dental unit, Autoclave, etc.
Emergency	ECG, Patient monitor, Oxygen inhalation set, Resuscitator, etc.

The need for strengthening of health facility for following 3 regions in Table 121 is high compared to other regions because of high poverty level (Korce and Diber Region) shown in Table 72 and Figure 5 and population growth in summer time (Vlore Region). The Minister explained that these areas are candidate regions for upgrading of regional hospital. Further survey shall be needed to determine the details of plan for strengthening of health facility. Further study of each facility and region would be required.

Table 121 Target Area

Area	Characteristics of the Region	Target Facility
Korce	Contained poor area	Korce Regional Hospital, Devoll District Hospital, Kolonje Day-care Center, Pogradec Day-care Center
Diber	Contained Poor Area	Diber Regional Hospital, Bulquize Day-care Center, Mat Day-care Center
Vlore	Tourist area. Population increased on summer time.	Vlore Regional Hospital, Sarande District Hospital, Delvine Day-Care Center

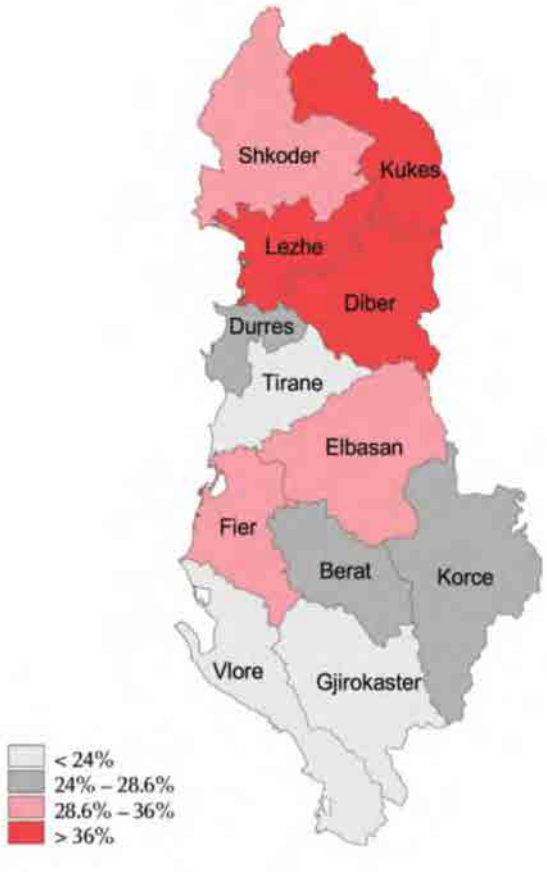

Figure 5 Regional Poverty Ratio

Source : INSTAT(2004)

(2) Primary Health Care Facilities

In primary health care facilities, medical services of diagnostic with an interview and home visit by physician have been provided. Since the examination and operation which required medical equipment shall be performed at second level hospital, the demands for medical equipment at primary health care facilities is very few. The demands for repair and renovation of primary health facility is also few because the main health service is an interview utilizing a simple room and it is possible to secure enough of the budget for maintenance.

(3) Tertiary Health Care Facility

For tertiary care facilities, because the budget allocation has relatively been made, and in addition to the development of facilities and medical equipment by the Ministry of Health's budget, donors' supports are also being made, therefore it was confirmed that demands for infrastructure would be less.

Chapter 7

Chapter 7 Issues in Albania and Proposals for Project Formulation

7.1 Current situation in the Health Sector and Issues

(1) Sign of Aging Population

The elderly population is increasing by extending life expectancy due to economic development and progress of medical technology in Albania. Although the elderly population of over the age of 65 is currently still below the younger population of under the age of 15, and there is uncertainty in demographic trend due to the birth rate trend and repatriation of emigrants, the difference between the two population groups is expected to be narrowed gradually and Albania would face problems of an aging society and the increase of burden of the health care cost for the elderly in the future.

(2) Changes in the Disease Structure

According to hospital statistics, the prevalence of infections and parasitic diseases have been declining, but respiratory system disease, digestive system diseases, complication of pregnancy, and accident trauma have remained at the same level, and lifestyle-related diseases such as circulatory diseases, tumor, and neonatal disease are on the increase. Cause of death by trauma accident is on the rise, and those by tumors, neonatal disease and cardiovascular disease are unchanged. Appropriate early medical care, diagnosis, and treatment at the nearest locations would play important role for dealing with the coming disease trends.

(3) Bypass Phenomenon at Secondary Health Care Facilities

Albania has been facing a problem of “bypass phenomenon”, in which patients concentrate at tertiary health care facilities in the capital. The main reason is observed to be weakness of Regional Hospitals and District Hospitals as secondary health care service. The result of survey of regional hospitals in Vlore, Dibura, and Korce shows that relatively a lot of medical equipment is decrepit and major equipment necessary to provide medical service at secondary health facilities are lacking. Since those hospitals have a low bed occupancy rate, and an allocation of hospital income and a budget from Ministry of Health for secondary health facilities are inadequate, they are in a vicious circle in which they cannot allocate enough resources for infrastructures and the maintenance of medical equipment. Many patients are concentrated at a tertiary health facility as those secondary hospitals have low facility management capability and maintenance of hospitals is inadequate.

7.2 Contents of Possible Assistances and Suggestion

Given the recent aging trend and needs for early diagnosis and treatment, the concentration of patients at a tertiary health care facility without utilizing secondary health facilities is one of the fundamental problems of the health sector in Albania. The Study result suggests that the main cause stems from the vulnerability of local medical service system. Therefore, it is recommended to strengthen regional hospitals. Ministry of Health officials generally confirmed above understanding and further provided a view that regional hospitals of Vlore (southwestern and coastal areas), Dibra (northeastern part), and Korce (southeastern), being located in geographically important regions of Albania, should be reinforced as a hub hospital in each region. Intraregional hospitals (including district hospitals), not only regional hospitals, should also be strengthened.

In order to revitalize local health service, strengthening the medical referral system and the facility management operation, such as cooperation between medical facilities are also important, in addition to development of medical facilities' infrastructures. Moreover, in order to make effective use of upgraded medical equipment, the enhancement of the function of Biomedical Engineering Center, which is a responsible agency for the medical equipment maintenance at national level, should be promoted. By using a technical cooperation scheme, the needs of assistant for these areas are also high.

It should be noted that the necessity of taking countermeasures against lifestyle-related diseases and the importance of preventive measures have been also acknowledged in the NSDI 2007-2013 and in the draft of NSDI 2014-2020. Furthermore, NSDI 2014-2020 pursues to improve public access to basic health services (including secondary health care) for the purpose of achieving the target of "Increasing access to effective health services". Therefore above-mentioned suggestions for project formulation on health sector meet the policy of the health sector in Albania. The details of assistance are shown in below.

(1) Strengthening of Medical Equipment at Regional Health Care Facilities

Development of medical equipment is to be promoted on regional basis. The conditions of medical facilities of three candidate regions and the equipment's development plans are shown in the table below. It should be noted that this plan is based on the inference of the general conditions of regional hospitals obtained by the sample survey of Durres and

Elbassan Regional Hospitals which was conducted in this Study. Therefore, it is necessary to confirm actual needs of medical facilities in the target areas by further investigation of the real conditions of those facilities and a disease situation in these area. At present, it is necessary to consider the possibility of converting district hospitals, which have been positioned under the umbrella of regional hospitals, into Day-Care Centers by downgrading their functions, then, investing into strengthening of the function of regional hospitals to use local medical resources effectively. In detail, there is a plan of converting a part of district hospitals in Korce and Vlore Districts into Day-Care Centers. In this case, their inpatient's functions and facilities are to be transferred to other district hospitals or regional hospitals

(2) Technical Field

1) Strengthening of Medical Referral System

In order to function the medical resource reallocation within regions, reinforcing coordination mechanism between facilities in different referral levels. According to NSDI 2014-2020, achieving "1) Increase access to effective health services" needs proper function of referral system from primary to tertiary level by utilizing the family doctor as a foundation of primary health service. This strategy aims at improvement of the management capacity and quality of services, for which needs for the technical knowledge would be high. Especially, it is important to give extra consideration to avoid the consequences that the access to health services for local people ends up with being exacerbated as a result of streamlining the function of district hospitals.

2) Strengthening of National Biomedical Engineering Center

Currently, maintenance of medical equipment is carried out by each medical facility. However, since the inventory of the medical device has not been updated for long time nor various guidelines and a maintenance plans based on the actual condition are not formulated. According to the explanation from the Ministry of Health, currently, Albania is considering the formulation of such guidelines, including the maintenance and development of laws that take into consideration the EU standards. Therefore, the needs of technical guidance for the Biomedical Engineering Center, which undertakes the medical equipment management at national level, would be high in order to strengthen the maintenance system of medical facilities.

2) Hospital Management

For effective assistance and effective usage of medical infrastructure and equipment, the capacity of hospital management should be strengthened. In detail, it is expected to seek the improvement in the areas of health system management and health workforce through technical assistances, such as training courses of health system strengthening and 5S-KAIZEN-TQM. Importance of these fields has been consistently recognized since the time of NSDI 2007-2013, and the draft of NSDI 2014-2020 aims at improvement of the clinical management and the general work operations in health care facilities in order to achieve "the improvement of management capacity of service and facilities and service quality." Therefore, supports for capacity building of hospital management would be important.

7.3 Important Points to Confirm for Future Assistance

In order to formulate a project based on above mentioned suggestions, further survey for clarifying the details of medical facilities and disease situation in each region shall be needed. In addition, a consideration for the project size and contents should be taken from the viewpoint of the availability of allowance for human resources who are responsible for maintenance and its financial resources, and the feasibility of the plan.

In the health sector of Albania, to increase income from health insurance by reviewing the current health insurance system have become concerns as a part of agendas for system reform. In addition, as described above, the government intends to lead an effective use of limited medical resources by reviewing and streamlining the current health service system. Such efforts under the current administration would generate positive impacts on development and management of infrastructure and the operation of medical facilities as well.

For human resource development, the Swiss government plays a central role in this field, thus possibility of effective utilization of upgraded equipment by trained personnel would be high. For the maintenance of medical products, however, it is still important to improve the skill of management in accordance with upgrade of equipment, as mentioned in the recommendations.

Table 122 Medical Facilities of Three Regions Nominated for Equipment Upgrade

	Region/ Facility	Number of Bed	Number of Patients	Bed Occupancy Rate	Number of Operation	Level of Facility in Plan
1	Dibra (3 Districts)					
	Regional Hospital	295	6,895	43.4	533	Regional Hospital
	District Hospital (Bulqize)	65	1,347	40.8	-	District Hospital
	District Hospital (Mat)	148	3,039	36.4	523	District Hospital
2	Korce (4 districts)					
	Regional Hospital	463	11,207	40.2	1,487	Regional Hospital
	District Hospital (Devoll)	41	1,002	32.7	-	Day-care Center
	District Hospital (Kolonje)	83	650	11.5	95	District Hospital
	District Hospital (Pogradec)	165	3,630	21.2	653	District Hospital
3	Vlore (3 districts)					
	Regional Hospital	591	15,847	55.5	2,107	Regional Hospital
	District Hospital (Delvine)	30	148	9.4	-	Day-care Center
	District Hospital (Sarande)	85	3,458	48.8	477	District Hospital

Source: Ministry of Health of Albania (the numbers of patients and beds are based on statistics of 2012)

1) Equipment Contents of Regional Hospitals (Dibura Region and Korce Region)

	Department · Equipment	Q'ty	Japanese Products*		Department · Equipment	Q'ty	Japanese Products*
	Radiology				Laboratory		
1	MRI	1	○	1	Hematology analyzer	1	○
2	CT	1	○	2	Biochemical analyzer	1	
3	General X-ray	1	○	3	Electrolyte analyzer	1	
4	Fluoroscopy	1	○	4	Immunology analyzer	1	
5	CR unit	1	○	5	Hormone analyzer	1	
6	Ultrasonic diagnostic apparatus (obstetric)	1	○	6	Blood bank refrigerator	1	○
7	Ultrasonic diagnostic apparatus (cardiac)	1	○	7	Plasma freezer	1	○
	Endoscopy				Operation		
1	Video gastroscope	2	○	1	Operation light	3	○
2	Video colonoscope	2	○	2	Operation table	3	○
3	Video bronchoscope	1	○	3	Electrosurgical unit	3	○
	ICU			4	Patient monitor	3	○
1	Ventilator	5		5	Anesthesia	3	
2	Patient monitor	5	○		Emergency		
3	ICU bed	5	○	1	ECG	1	○
	Dental			2	Patient monitor	5	○
1	Dental unit and chair*	1	○	3	Suction unit	5	
2	Autoclave	1		4	Ventilator	5	
3	Dental instruments	1		5	ICU bed	5	○
				6	Infusion pump	5	○
				7	Syringe pump	5	○

Remark: Assumed to be made by Japanese Manufacture

(2) Equipment contents of Regional Hospital (Vlore Region)

	Department · Equipment	Q'ty	Japanese products*		Department · Equipment	Q'ty	Japanese products*
	Radiology				Laboratory		
1	General X-ray	1	○	1	Hematology analyzer	1	○
2	Fluoroscopy	1	○	2	Biochemical analyzer	1	
3	CR unit	1	○	3	Electrolyte analyzer	1	
4	Picture archiving and communication system	1		4	Immunology analyzer	1	
5	Ultrasonic diagnostic apparatus（cardiac）	1	○	5	Hormone analyzer	1	
	Endoscopy			6	Blood bank refrigerator	1	○
1	Video gastroscope	2	○	7	Plasma freezer	1	○
2	Video colonoscope	2	○		Emergency		
3	Video bronchoscope	1	○	1	ECG	1	○
	Dental			2	Patient monitor	5	○
1	Dental unit and chair	1	○	3	Ventilator	5	
2	Autoclave	1		4	ICU bed	5	○
3	Dental instruments	1		5	Infusion pump	5	○
				6	Syringe pump	5	○

Remark: Assumed to be made by Japanese Manufacture

3) Equipment Contents of District Hospital (per facility)

	Department · Equipment	Q'ty	Japanese Products*		Department · Equipment	Q'ty	Japanese Products*
	Radiology				Laboratory		
1	General X-ray	1	○	1	Hematology Analyzer	1	○
2	Fluoroscopy	1	○	2	Biochemical Analyzer	1	
3	CR Unit	1	○	3	Electrolyte Analyzer	1	
4	Ultrasonic Diagnostic Apparatus（Obstetric）	1	○	4	Centrifuge	1	○
	Endoscopy				Operation		
1	Video Gastroscope	1	○	1	Operation Light	3	○
2	Video Colonoscope	1	○	2	Operation table	3	○
3	Endoscope storage locker	1	○	3	Electrosurgical unit	3	○
	ICU			4	Patient monitor	3	○
1	Ventilator	5		5	Anesthesia	3	
2	Patient monitor	5	○				
3	ICU bed	5	○				
	Emergency				Dental		
1	ECG	1	○	1	Dental unit and chair	1	○
2	Patient monitor	1	○	2	Autoclave	1	

Remark: Assumed to be made by Japanese Manufacture

4) Equipment Contents of Day-care Center (per facility)

	Department · Equipment	Q'ty	Japanese Products*		Department · Equipment	Q'ty	Japanese Products*
	Radiology				Laboratory		
1	General X-ray	1	○	1	Hematology analyzer	1	○
2	Fluoroscopy	1	○	2	Biochemical analyzer	1	
3	CR unit	1	○	3	Electrolyte analyzer	1	
4	Ultrasonic Diagnostic Apparatus(Obstetric)	1	○	4	Centrifuge	1	○
	Endoscopy				Operation (Minor)		
1	Video Gastroscope	1	○	1	Suction unit	1	
2	Video Colonoscope	1	○	2	Treatment table	1	○
3	Endoscope Storage Locker	1	○		Dental		
	Emergency			1	Dental unit and chair	1	○
1	Operation Light	2	○	2	Autoclave	1	
2	ECG	2	○				
3	Patient monitor	2	○				

Remark: Assumed to be made by Japanese Manufacture

5) Estimated amount of equipment costs in each region, Dibura, Korce, and Vlore (Unit: Yen)

Name of Region and Facility	Quantity	Per facility		Areas Total
		Subtotal	Total	
(1) Dibura Region				
Regional Hospital	1	572,000,000	572,000,000	
District Hospital	2	200,050,000	400,100,000	
Day-care Center	-	-	^	972,100,000
(2) Korce Region				
Regional Hospital	1	572,000,000	572,000,000	
District Hospital	2	200,050,000	400,100,000	
Day-care Center	1	106,750,000	106,750,000	1,078,850,000
(3) Vlore Region				
Regional Hospital	1	222,850,000	222,850,000	
District Hospital	1	200,050,000	200,050,000	
Day-care Center	1	106,750,000	106,750,000	529,650,000
			Total	2,580,600,000

Appendix

Appendix1

1. The Survey Team

No	Name	Role	Organization
1	Mr. Tamotsu NOZAKI	Chief / Health Planning	Fujita Planning Co., Ltd.
2	Mr. Akio KANEKO	Health Facility and Medical Equipment Planning	LLC. AMHN

2. Survey Schedule

No.	Date		Content
1	2014/3/16	Sun	Lv Tokyo→Zurich →Ar Belgrade
2	2014/3/17	Mon	AM: Courtesy call to JICA Balkan PM: Lv Belgrade →Skopje→Ar Tirana
3	2014/3/18	Tue	AM: Courtesy call to JICA Albania PM: Courtesy call to MoH
4	2014/3/19	Wed	Surveying MoH and Ministry of Finance
5	2014/3/20	Thu	Surveying other donors
6	2014/3/21	Fri	Surveying public health facilities
7	2014/3/22	Sat	Internal meeting/ making report
8	2014/3/23	Sun	Internal meeting/ making report
9	2014/3/24	Mon	Surveying public health facilities
10	2014/3/25	Tue	Surveying public health facilities
11	2014/3/26	Wed	Surveying local agents
12	2014/3/27	Thu	Surveying other donors
13	2014/3/28	Fri	Discussion with authories in MoH
14	2014/3/29	Sat	Internal meeting/ making report
15	2014/3/30	Sun	Internal meeting/ making report
16	2014/3/31	Mon	Gathering answers of questions and studying project framework
17	2014/4/1	Tue	Lv Tirana→Ar Pristina
18	2014/4/2	Wed	AM: Coutesy call to JICA Kosovo PM: Coutesy call to MoH
19	2014/4/3	Thu	Surveying public health facilities
20	2014/4/4	Fri	Surveying public organizations
21	2014/4/5	Sat	Internal meeting/ making report
22	2014/4/6	Sun	Internal meeting/ making report
23	2014/4/7	Mon	Surveying public health facilities
24	2014/4/8	Tue	Surveying public health facilities
25	2014/4/9	Wed	Surveying local agents
26	2014/4/10	Thu	Surveying other donors
27	2014/4/11	Fri	Surveying other donors
28	2014/4/12	Sat	Internal meeting/ making report
29	2014/4/13	Sun	Internal meeting/ making report
30	2014/4/14	Mon	Discussion with authories in MoH
31	2014/4/15	Tue	Reporting the results to JICA Kosovo and MoH
32	2014/4/16	Wed	Lv Pristina→Ar Skopje Lv Skopje→Ar Belgrade
33	2014/4/17	Thu	Reporting the results to JICA Balkan
34	2014/4/18	Fri	Lv Belgrade→Ar Zurich
35	2014/4/19	Sat	Ar Tokyo

(1) List of Parties Concerned in Kosovo

		Name	Title	Organization
1	Ministry of Health	Dr. Ferid AGANI	Minister of Health	Ministry of Health
		Dr. Gani SHABANI	General Secretary	Ministry of Health
		Dr. Curr GJOCAJ	Director	Department of Health Service
		Mr. Mentor SADIKU	Director	Department for European Integration and Policy Coordination
		Ms. Zena HARAQIJA	Ditto	Ministry of Health
2	National Institute of Public Health	Dr. Naser RAMADANI	Director	National Institute of Public Health
3	Kosovo Medicines Agency	Mr. Arianit JAKUPI	Chief Executive Director (CEO)	Kosovo Medicines Agency
4	University Clinical Centre Hospital of Kosovo	Dr. Nijazi GASHI	Executive Director	University Clinical Centre Hospital of Kosovo
		Dr. Nexhmedin SHALA	Executive Assistant for Health Issues	University Clinical Centre Hospital of Kosovo
		Mr. Agron BOSHNJAKU	Chief of Biomedical Services	University Clinical Centre Hospital of Kosovo
5	Faculty of Medicine, University of Prishtina	Mr. Agron BOSHNJAKU	Chief of Biomedical Services	Faculty of Medicine, University of Prishtina
6	United Nations Development Programme	Dr. Salih AHMETI	Dean of Faculty of Medicine	United Nations Development Programme
7	Swiss Agency for Development and Cooperation	Mr. Christoph Lang	Deputy Director	Swiss Cooperation Office Kosovo
		Ms. Merita Stavileci MUSTAFA	Senior National Programme Officer	Swiss Cooperation Office Kosovo
8	Luxembourg Cooperation	Ms. Aferdita Ademi-Osmani	Chief Technical Advisor	Luxembourg Cooperation
		Mr. Poul Thim	Consultant, Health Advisor	Luxembourg Cooperation
9	European Union Office in Kosovo	Mr. Samir SELIMI	Social Development Task Manager /	European Union Office in Kosovo
10	World Health Organization	Dr. Skender Sylya	Head of Office	World Health Organization Prishtina
11	Main Family Health Centre Dr. Nexhat Cuni Mitrovica	Dr. Fevzi Sylejmani	Director	Main Family Health Centre Mitrovica
		Dr. Nexhat Cuni	-	Main Family Health Centre Mitrovica
12	Regional Hospital Mitrovica	Dr. Agim Peci	Director, Ophthalmologist	Regional Hospital Mitrovica
13	Main Family health Centre Gjakova	Dr. Violeta XERXA	Director	Main Family health Centre Gjakova
14	Regional Hospital Peje (Gjakova)	Dr. Haxhi KAMBERI	Executive Director	Regional Hospital Gjakova
15	Regional Hospital Prizren			
		Dr. Lumnije HOXHA	Medical Director, Ophthalmologist	Regional Hospital Prizren
		Mr. Shyari HASANI	Nursing Director	Regional Hospital Prizren
		Mr. Qazim Gashi	Administrative Director	Regional Hospital Prizren
16	Surgical Clinic ALOKA (Private Clinic)	Dr. Halit MALOKU	Chief Executive Officer	Surgical Clinic ALOKA
17	International Medicine Hospital	Mr. Muhammed UCKARDES	Operation Manager	International Medicine Hospital
18	JICA Kosovo Office	Ms. Kanako TERUI	ODA Advisor to Ministry of Europea	JICA Kosovo
		Ms. Arberore RIZA	Technical Coordinator	JICA Kosovo

(2) List of Parties Concerned in Albania

		Name	Title	Organization
1	Prime Minister Office	Ms. Majlinda DHUKA	Deputy Secretary General	Department of Develop. Programming, Financing and Foreign Aid
2	Ministry of Health	Mr. Ilir BEQAJ	Minister	Ministry of Health
		Mrs. Milva EKONOMI	Deputy Minister	Ministry of Health
		Mr. Romeo ZEGALI	Director	EU Integration and Information with Donor
		Dr. Gazmed BEJTJA	Head of Department	Public Health
		Dr. Petro MERSINI	Director	Department of Hospital Planning
3	Institute of Public Health	Prof. Genc BURAZERI	Deputy Director	Institute of Public Health
		Ms. Florida BELULI	Assistant of the Director	Institute of Public Health
4	Compulsory Insurance Fund Healthcare	Dr. Astrit GECI	General Director	Compulsory Insurance Fund Healthcare
		Mr. Margarit EKONOMI	IT Adviser to the General Director	Compulsory Insurance Fund Healthcare
5	National Center for Biomedical Engineering	Mr. Paulin KODRA	Director	National Center for Biomedical Engineering
6	Vlore Regional Hospital	Dr. Mersini BRUNA	Director, Ophthalmologist	Vlore Hospital
7	Swiss Agency for Development and Cooperation	Mr. Sokol HAXHIU	National Programme Officer	Swiss Agency for Development and Cooperation
8	World Bank	Ms. Elda Hafizi	Program Assistant, LARS Coordinator	World Bank
9	Mother Teresa University Hospital Center	Ms. Ogerta MANASTIRLIU	General Director	Mother Teresa University Hospital Center
		Ms. Eliana PETALLA	Head of Statistic Department	Mother Teresa University Hospital Center
		Mr. Ilir AKSHIJA	Statistics Department	Mother Teresa University Hospital Center
		Mr. Dritan LENA	IT Department	Mother Teresa University Hospital Center
		Ms. Irma HOXHA	Clinical Engineering Department	Mother Teresa University Hospital Center
		Dr. Maksim BASHO	Head of Emergency New Hospital	Mother Teresa University Hospital Center
		Dr. Ndok MARKU	Head of Laboratory Department of Emergency New Hospital	Mother Teresa University Hospital Center
		Dr. Aida CANO	Senior Technical Staff of Laborator	Mother Teresa University Hospital Center
13	University Hospital for Pulmonary	Dr. Epaminonda FYPE	Director	University Hospital for Pulmonary, Tirana
14	Polyclinic of Specialties No. 3	Dr. Valdete MALAJ	Internal Medicine (Endoscopy)	Polyclinic of Specialties No. 3
15	Durres Regional Hopsital	Mrs. Ardiola FRASHERI	Director	Durres Regional Hospital
		Dr. Almo TEDESKINI	Deputy Director, Continuous Educa	Durres Regional Hospital
		Mr. Ilir DODA	Head of Radiology	Durres Regional Hospital
		Ms. Alma DAUTI	Clinical Engineer	Durres Regional Hospital
16	Elbasan Regional Hospital	Dr. Alban HOXHA	Deputy Director, General Surgeon	Elbasan Regional Hospital
17	Health Centre of Family Doctors, Kavaje	Dr. Kujtim VEIZI	Director	Health Centre of Family Doctors, Kavaje
18	JICA Balkan Office	Mr. Toshiya ABE	Resident Representative	JICA Balkan Office
		Mr. Ryuichi ITO	Assistant Resident Representative	JICA Balkan Office
		Mr. Toru OGURA	Project formulation Advisor	JICA Balkan Office
17	JICA Albania Office	Mr. Sokol KONOM	Technical Coordinator	JICA Albania