The WHO Mongolia Annual Report for 2011 is a part of the WHO Western Pacific Regional Office initiative to highlight the country’s achievements and challenges that are faced in addressing the national health priorities.

The aim of this report is to share our contribution to the national health development with government counterparts, United Nations (UN) agencies, other parties and the general public.

The 2011 country programmes were based on the strategic priorities identified in the WHO Country Cooperation Strategy 2010-2015 and fully aligned with the priorities of the National Health Sector Strategic Master Plan 2006-2015 in areas of (1) health systems strengthening through primary health care approach; (2) scaling up prevention and control of noncommunicable diseases, injuries, violence and their determinants; (3) sustaining and accelerating the achievements of health-related Millennium Development Goal targets; (4) strengthening health security including control of communicable and vaccine-preventable diseases and (5) strengthening environmental health programmes.

Significant progress has been made in addressing the countries health problems as demonstrated in this report, especially on progress towards achievements of the Millennium Development Goals 4, 5 and 6, strengthening primary health care programmes, putting noncommunicable disease prevention and control on higher agenda, enhancing coordination of zoonoses prevention and control, improving health security through capacity building, strengthened coordination mechanism for emergency and disaster management and addressing the impact of climate change on health.

Despite the progress being made, there still remains challenges to be addressed to reach the goal of Health For All especially for the people living in rural and remote areas of Mongolia. WHO will continue its efforts to address these together with its partners in the coming years through its biennial country programmes.

I would like to take this opportunity to express my sincere thanks and gratitude to all government counterparts, local non-governmental organizations, UN agencies, international partners, WHO Country, Regional and Headquarters staff who have continuously supported our programmes throughout the year and look forward for the same in the forthcoming years.

Dr Wiwat Rojanapithayakorn,
WHO Representative in Mongolia
OUR MISSION AND OUR GOAL

The World Health Organization Office in Mongolia works closely with the Ministry of Health, other sectors of the government, international partners and the non-governmental organizations to improve the health and well-being of the Mongolian people especially those who are poor and vulnerable and live in rural and remote areas of the country. Our main focus is on public health and our goal is to improve the life expectancy and quality of life of the people by preventing diseases, promoting health, treating those who are sick and rehabilitating those who are disabled.

OUR LEADERSHIP

We provide leadership on matters critical to health such as during health emergencies and pandemics; engage with partners where joint action is needed; disseminate vital health information and knowledge; set norms and standards on public health; provide expert technical support on wide areas in the field of health and assess and monitor health situation and trends. Our organization is a specialized agency of the United Nations System and is non political and adheres to the principles of human rights, gender equity and non-discrimination. The WHO Country Representative is the head of the Country Office and directs country operation.

OUR COMMITMENT

We have been working in Mongolia since nineteen sixty’s and our work has greatly contributed towards reducing the high burden of childhood deaths, maternal deaths and deaths due to several communicable diseases such as diarrhoea, respiratory diseases and tuberculosis. These diseases were the major causes of misery and suffering among the Mongolian population during the past decades. We commit our self to work closely with the government of Mongolia especially with Ministry of Health and all national, international and non-government organizations towards reaching the goal for health of all Mongolian population through achievement of Millennium Development Goals and beyond.

OUR MISSION AND OUR GOAL

Our strategic objectives are clearly defined in the WHO Country Cooperation Strategy for 2010-2015 which has been developed with active and close participation of the Ministry of Health, other sectors of government and our international and national partners. The strategy was approved and endorsed at the World Health Assembly in 2010 by the Director General and Regional Director of WHO Western Pacific Regional Office (WPRO) and the Minister of Health Mongolia.

Our focus will be on five priority areas namely:

1. Health systems strengthening through primary health care approach;
2. Scaling up prevention and control of noncommunicable disease injuries, violence and their determinants;
3. Sustaining and accelerating the achievement of health-related Millennium Development Goals targets;
4. Strengthening health security including control of communicable and vaccine-preventable diseases;
5. Strengthening environmental health programmes.
1 HEALTH SYSTEMS STRENGTHENING THROUGH PRIMARY HEALTH CARE APPROACH

- **Primary Health Care (PHC) Reform:** Technical and financial support was provided to organize a consultative national workshop of stakeholders to discuss PHC reform. Province and district health department directors actively participated and made several recommendations to strengthen primary health care services for rural and remote population. Integrated primary health care training for capacity building increased funding for public health activities, mobile health clinics to reach remote population were some key recommendations made.

- **Training Package on PHC:** An integrated training package on primary health care covering maternal and child health, noncommunicable diseases prevention and control, communicable diseases surveillance and response, mental health and health emergency preparedness was developed and field tested. Several trainings for provincial district level health care workers were conducted in Khuvsgul, Gobi Altai, Dornod and Bayankhongor provinces.

- **Public Health Laboratory:** The National Strategy on Public Health Laboratory Services was developed and approved with WHO technical support following capacity building of national counterparts.

**Key achievements**

- Joint review of Health Sector Strategic Master Plan using Joint Assessment of National Strategies & Country Health Intelligence Portal tools.
- Successful implementation of Integrated PHC programme in 26 districts of 8 provinces funded through joint UN project on human security (US$ 1 million).
- Assessment of health care financing status using Organizational Assessment for Improving and Strengthening (OASIS) and Financial Burden of Health Payments Methodologies.
and based on the Asia Pacific Strategy for Strengthening Health Laboratory Services 2010-2015.

- **Blood Safety**: A quality assurance programme was initiated at the National Blood Transfusion Centre, the Second General Hospital and Maternal and Child Health Centre and following initial assessment of the gaps in service standards, guidelines and standards for quality improvement, capacity of health care workers was improved and basic supplies and equipment provided.

- **Drug Regulation**: The collaborative programme on fourth health sector development funded by Asian Development Bank resulted in the approval of legislation to establish an independent National Drug Authority which will be responsible for the oversight of quality and safety of essential drugs in the country.

- **Health Cluster**: Global health cluster approach for coordination of humanitarian action during emergency and disaster was introduced as part of the join UN programme. WHO and Ministry of health were co-health cluster leads and several key activities were conducted to strengthen the coordination among partners in the event of health emergency and disasters. Large amounts of resources were mobilized during Zud (extreme cold weather) disaster; and health care workers capacity in provinces and provincial districts most affected were built to respond to the emergency.

- **Donor Coordination**: WHO continued to support the Ministry of Health strengthen its door coordination mechanism by providing technical and financial support. As a result, quarterly meetings of partners in health were conducted to discuss important health programmes including the mid-term review of the national health sector master plan, noncommunicable diseases prevention and control and maternal and child health programmes.

### Key achievements

- Development of human resource for health database for licensing of health care workers.
- Support provided for passing of the law to establish National Drug Authority.
- Introduction of health cluster approach to health emergency and disaster management (earthquake preparedness plan, health emerging preparedness plan for major health facilities, severe winter disaster response).
- Support the establishment of Ministry of Health’s donor coordination forum with discussion on specific programmes at quarterly meetings (noncommunicable diseases, maternal and child health, mid-term review of the health sector strategic master plan, etc.).

### Health Care Financing

Several surveys have been conducted to support evidence based decision making. The organizational and institutional aspects of health care financing were assessed with technical support from Head Quarter and Regional Office using the WHO Organizational Assessment for Improving and Strengthening Health Financing approach. It has provided timely evidences and recommendations according to the three fundamental, interconnected health financing challenges in the region. Results of the surveys such as Financial burden of health payments, Secondary hospital service cost and out-of-pocket payment have been introduced at various meetings for policy discussions.

“In 2010, 29.2 percent of the health care service expenditure was spent for primary care while 70.8 percent was spent for secondary and tertiary care”

Health Indicators, 2010, Ministry of Health
and advocacy. Based on the findings of these surveys, a policy brief was prepared.

Health care financing is one of the key areas of the Health Sector Strategic Master Plan which have 3 strategic objectives in this area including funding increase, strengthening financial management and health insurance system. Technical support provided to review and evaluate implementation of the health care financing strategic objectives. Recommendations for next implementation framework was developed in line with national and regional health care financing strategy and discussed with key stakeholders.

Technical support provided to improve health care financing legal environment such as development of new regulation on payment method of the state budget financing, revision of drafts of the Citizen’s Health Insurance Law.

“Health insurance coverage rate was 82.6 percent in 2010. Informal sector including herdsmen, very poor and unemployed are not fully enrolled. One third of the herdsmen were covered by health insurance”

Annual report, Social Insurance General Office, 2010

Directions for 2012-2013

WHO will continue to provide technical and financial support in the areas primary health care, essential drugs, public health laboratory, human resources for health, health financing, health emergency preparedness and response and donor coordination. Some key areas of work in the coming biennium will focus on strengthening the capacity of health care workers to deliver quality primary health care services, collaboration with Asian Development Bank to improve drug safety, develop a model district hospital and improve quality of health services.

Different views regarding health insurance among policy and law makers exist and some views undermine the principals of social solidarity. Thus, long term strategy for development of social health insurance is necessary to strengthen social health insurance system in Mongolia. The strategy needs to focus on expanding health insurance coverage especially to the poor, unemployed and herdsmen and ways to reach universal coverage through social health insurance.

Continued technical support and capacity building is needed to implement country Health Care Financing strategy. Moreover, technical and financial support needed to institutionalize National Health Accounts.

Although Mongolia’s Health Care Financing Strategy has objective to keep out-of-pocket payment less than 25 percent of the total health expenditure, there is a risk of rapid increase in out-of-pocket spending. Evidences show that many poorer households are not utilizing health services due to financial barriers in seeking and accessing needed health care. Thus, technical assistance needed to develop evidence-based decision makings.
The year 2011 was very special for Mongolia in scaling up noncommunicable diseases. WHO Headquarter, Regional and Mongolia Offices have provided technical assistance to the Government in the preparation of the UN High Level Meeting (UNHLM) on the Prevention and Control of Noncommunicable Diseases.

The UNHLM on the Prevention and Control of Noncommunicable Diseases presented an opportunity of taking several important measures throughout the year according to the road map established. The participation of the President of Mongolia and Minister of Health at the UNHLM has showed Mongolia’s high level political commitment to address noncommunicable diseases as a top priority in terms of alcohol and tobacco prevention and control, and promotion of physical activity and healthy diet.

Mongolia surveillance reports using the WHO STEPwise approach for noncommunicable disease surveillance (2010) and Global School Health Survey (2011) were published and circulated widely.

**Key achievements**

- High-level political commitment on NCD as top priority in Mongolia.
- Integration of NCD into Healthy Cities Initiative (Ulaanbaatar and Darkhan).
- National strategy on developing rehabilitation care and service, 2011-2015 was endorsed.
- National strategy on prevention and control of deafness and hearing impairment, 2010-2019 was endorsed.
- Strengthened capacity of health care workers on ear and hearing care by introducing WHO manuals.
- Establishment of national network on alcohol prevention and control.
- Successful advocacy for high-level decision makers resulted in allocation of 1% of excise tax from alcohol to Health Promotion Fund. As of 2011, funds for Health Promotion Fund reached to US$ 2.3 million.
- Integration of NCDs into primary health care training package.
The “Stroke & Heart Attack Project” funded by Millennium Challenge Account (MCA) was officially signed by the Regional Director and launched on 15 March 2011.

During 2011, following project components were implemented:

- Prepared an advocacy pack “Preventing Noncommunicable Diseases in Mongolia” in order to scale up NCD prevention and control system and preparation for UN High Level Meeting on NCD, for policy makers’ awareness promotion and possible actions.

- National clinical guidelines of stroke and heart attack and the protocol of new treatment technology on thrombolytic therapy was approved.

- Salt intake baseline survey was conducted first time in Mongolia through shop survey (“Pinch salt” sub-project). As a result, the main bread company that supplies 60% of bread in Mongolian market had made 12% reduction in salt levels in its key bread products.

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**Directions for 2012-2013**

- Accelerate implementation of the UNHLM declaration on NCD at the country level.
- Strengthen prevention and control of child burn injury.
- Continue Stroke Registry development sub-project under stroke and heart attack project funded by MCA. With a view of establishing stroke and heart attack units as a next step.
Mongolia has made a steady progress towards achievement of Millennium Development Goals 4 and 5 targets set by the government. WHO has contributed greatly towards this goal by providing global, regional and country leadership on technical matters related to adapting the international standards and guidelines on integrated management of pregnancy, childbirth, postpartum and newborn care. In addition, the Integrated Management of Childhood Illness (IMCI) strategy has been fully implemented nationwide. WHO’s support has been in the areas of strengthening health systems through provision of basic supplies and equipment, developing skills of doctors and midwives especially those working in rural areas through innovative local fellowship programme and integrating maternal, newborn, child and adolescent health into primary health care services at the grass roots level.

### Key achievements

- National Maternal and Neonatal Health Strategy revised and approved.
- Child survival strategy approved.
- National Reproductive Health programme approved.
- Rapid Programme Review of Adolescent Health.

### Directions for 2012-2013

- Development of national strategy on integration of adolescent health into PHC
- Development of joint action plan on UNSG accountability framework for women and children
- Build capacity of health care workers on pregnancy, childbirth, postpartum, and newborn care

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3. SUSTAINING AND ACCELERATING THE ACHIEVEMENT OF HEALTH-RELATED MILLENIUM DEVELOPMENT GOALS TARGETS

Maternal, Child and Adolescent Health
Recent increase of reported congenital syphilis cases has caused major concern in Mongolia. High prevalence of syphilis and inadequate screening and treatment among pregnant women and their partners are major causes of congenital syphilis.

Routine mechanisms for antenatal care services require pregnant women to have test for syphilis in sexually transmitted infection (STI) clinics and they usually travel long distance and have to return to clinics to get the results of their test. This is particular challenge for people living in remote rural areas. This unacceptable burden on pregnant women results in a significant number of patients lost to follow-up, not receiving needed treatment. With support of WHO, Mongolia developed “One Stop Service” approach to improve access to maternal syphilis screening and treatment. The principle of “One Stop Service” is that pregnant women will receive diagnosis by rapid syphilis test, counselling, contact tracing and treatment during the first visit at the antenatal or primary care.

The strategy of “One Stop Service” was piloted in two provinces of Mongolia and resulted in decrease of number of congenital syphilis. Therefore, it was expanded to additional six districts of the capital city and six provinces with financial support of the Global Fund. Consequently, the Government adopted “One Stop Service” as the national strategy for elimination of congenital syphilis in Mongolia.

Key achievements
- National strategy on elimination of congenital syphilis 2010-2015 approved.
- National guidelines on STI management revised and approved.
- National guidelines on HIV management revised and approved
- National monitoring & evaluation plan for HIV/AIDS and STI developed
Recent increase of Multi-Drug Resistant Tuberculosis (MDR-TB) cases and weak capacity of the National TB Programme (NTP) on clinical management of MDR-TB patients are the major challenges in TB control in Mongolia. WHO has been providing technical support through external experts to the NTP. However, most of the consultancies were short-term. Hence, consistent and on-going support is need to improve management of MDR-TB in Mongolia.

Recently, NTP, with support of WHO decided to establish distance consortium with WHO Collaborating Center Latvia Tuberculosis Foundation. The consortium will provide on-going support on MDR-TB management, including children’s TB. This approach will be more cost-effective and sustainable, with limited language barrier. This mechanism will enable national, provincial and district level providers to receive direct advise from experienced international colleagues on difficult cases. Currently, the process of resource mobilization to establish this mechanism is discussed with some donor agencies within and outside of country.

As of December 2011, Mongolia has received from the Global Fund (GF) 5 grants for TB and 4 grants for HIV including health systems strengthening with approximate amount of funding US$ 44 million. WHO provided technical support in development of all the proposals since 2002. The following grants have been approved and implemented in Mongolia:

- **Round 1 and RCC: Acceleration of DOTS - US$ 10,384,964.**
- **Round 4: Strengthening the national response to tuberculosis - US$ 4,083,764.**
- **Round 2 and RCC round 2: Project on strengthening sustainable national prevention and care programme on HIV/AIDS in Mongolia - US$ 9,485,593.**
- **Round 5: Scaling up targeted HIV/AIDS prevention programme in Mongolia - US$ 4,235,642.**
- **Round 7: Maintaining HIV low prevalence in Mongolia through scaling up universal access for HIV/AIDS prevention, treatment, care and support for most-at-risk populations and strengthening the health sector - US$ 2,093,253.**
- **HIV single stream funding: Maintaining HIV low prevalence in Mongolia through the national prevention, care, treatment and support programmes on HIV/AIDS – US$ 2,298,217.**
- **HSS single stream funding: To improve the quality laboratory services for HIV, AIDS, STI, TB and Blood safety through strengthening the National Laboratory Network, the Quality of Health Management Information System and Infection Control - US$ 2,066,483.**
- **TB single stream funding: Achieving the TB-related Millennium Development Goals targets by 2015 through improving quality of and access to TB services by strengthening DOTS programme, infection control and addressing the threats of MDR-TB and the TB, HIV co-infection - US$ 7,338,359.**

In addition, WHO provided technical support in the implementation, monitoring, reporting and evaluation of the GF projects.

### Directions for 2012-2013

- Developing innovative approach to accelerate STIs and TB prevention and control
- Strengthening HIV prevention programmes targeting key affected populations
- Supporting implementation of national strategy on elimination of congenital syphilis
- Strengthening capacity of health care providers on programmatic management of MDR-TB and infection control for TB
- Supporting the preparation for conducting the first TB prevalence survey
Mongolia is one of the countries with the highest risk of zoonoses due to large livestock population and closeness of contact between human and animals. Guided by Asia and Pacific Strategy for Emerging Diseases, Mongolia has established functional coordinating mechanism between animal and human health sectors for zoonoses prevention and control at all levels in 2010. Its membership includes health sector, veterinary, the National Emergency Management Agency and WHO.

Under the coordination mechanism the two sectors timely shared surveillance data, outbreak and event information and laboratory resources, conducted joint risk assessment, coordinated response and collaborative research and developed joint risk reduction and response strategies. The mechanism has further expanded its function to work on food safety, emergency management and effects of climate change on zoonotic diseases in 2011.

During outbreaks of animal anthrax and rabies in 2011, the events information sharing 24 hours, 7 days a week led to the early detection and effective response. Joint rapid response team, consisting of veterinarians, medical epidemiologists and emergency officers, took rapid action to make risk assessment and carried out joint response, including restriction and control of the animal movement, compulsory animal vaccination and culling of possible carriers. The team identified population at risk of anthrax and rabies infection, establishing “telephone hot-line” for health care providers and conducting joint awareness campaign for prevention of the diseases among human. Consequently, no human anthrax and rabies cases were reported in the animal outbreak areas.

Key achievements

- Initiated health cluster approach for humanitarian action during disasters and WHO as health cluster lead and Ministry of Health as co-lead.
- Established Field Epidemiology Programme, and 18 MFETP graduates to date.
- Intersectoral coordination mechanism for zoonosis prevention and control established, as regional model.
- Established coordinated animal and human surveillance system on major zoonoses.
- Infection control resource center is established.
- Communication center for health emergency established.
With the support of WHO, Mongolia established the Mongolian Field Epidemiology Training Programme (MFETP) in late 2009. By November 2011, eighteen health professionals graduated from MFETP (eight in the first cohort and ten in the second cohort). After their graduation from MFETP, most of them have been placed in key positions of surveillance and response in the country. The graduates have also actively involved in teaching for following cohorts so that they are continuing “learn by teaching”. Six trainees in third cohort commenced in January 2012.

MFETP is a one-year full-time training program in field epidemiology. It includes one to two months of introductory course and ten to eleven months of field work. The introductory course includes basic epidemiology and statistics and their usage in public health such as outbreak survey and response, surveillance and operational research. Every year, the curriculum is revised and updated, based on previous cohort experience.

During their field work, all trainees continue ‘in-service” training and are exposed to actual public health problem solving and this helps them to develop skills and allow them to play significant roles in the public health system in the country. Trainees working on “in-service projects” also benefit to the programme implementing organizations. Since 2009, trainees of MFETP first and second cohort have undertook a series of outbreak investigations, surveillance and research projects that contributed to policy change, improvement of evidence based decisions, surveillance forms, feedback and reports. For instance, in June 2011, the second cohort trainees conducted a study of hospital acquired infections among neonates in 3 major maternity hospitals in Ulaanbaatar. The survey results and developed recommendations contributed to review existing ministerial order of infection control, injection safety and newborn infants care practice. Trainees’ work also contributed to update the policy of prevention and control of anthrax in the country.

To ensure sustainability of the programme, WHO has transferred the management of MFETP to the National Center of Communicable Diseases (NCCD). The center has established MFETP unit with Director and two full time supervisors. The MFETP activities will be more closely linked with emergency response, surveillance and operational research in the country.
It has been estimated that more than 77% of the Mongolian population are infected with hepatitis B virus (HBV) at some time in their life and 10%-22% of general population are chronically infected with the virus. Liver cancer stands out as the single most common cause of mortality, the highest in the world - six times the global average (Ted Alcon, 2011, Lancet;377:1139-40). One of ten deaths in Mongolia were reported to be caused by liver cancer.

Mongolia is one of the first group of countries which have introduced hepatitis B vaccine into the routine immunization schedule among newborns and children under one year old. The incidence of viral hepatitis B has been decreasing substantially.

In order to monitor the effectiveness of the universal hepatitis B vaccination among children, WHO supported a series of national serological surveys. The first nationwide survey was conducted in 2004 enrolling 1,145 children aged 7-12 years old. The prevalence of HBsAg among the study population was 5.2% and the coverage of complete hepatitis B vaccination was 60%.

The second nationwide serosurvey for Hepatitis B universal vaccination was carried out in 2009-2010 enrolling 5,894 children aged 4-6 years old. HBsAg carrier rate among study population was 0.53%, which suggests that Mongolia has already reached the regional goal of less than 1% for hepatitis B prevalence, although it is still subject to final verification by the Regional Commission.

WHO has been closely working with the Government of Mongolia to improve vaccine management and timely administration of the birth dose for hepatitis B vaccine, which contributed to improve the effectiveness of the universal vaccination programme.

WHO continues to support the national strategy on viral hepatitis control focusing on vaccination of high risk groups and improvement of infection control, in addition to timely administration of the birth-dose of the immunization.

**Mongolia Reached Regional Goal for Hepatitis B control**

Key achievements

- Became the FIRST country in the world receiving the pandemic influenza A(H1N1) vaccines from WHO.
- WHO mobilized over US$ 3.5 million of health commodities and logistic support to respond to pandemic influenza in Mongolia.
- Mongolia has reached the regional goal for Hepatitis B control, subject to regional verification.
Keeping Mongolia a Polio-free Country

The polio outbreaks in Tajikistan and subsequent polio cases in the countries of Central Asia - Turkmenistan, Kazakhstan and Russian Federation in 2010 posed a significant threat of wild polio virus importation to Mongolia.

In 2011, China has also experienced the importation of wild polio virus in the Hotan prefecture, Xinjiang Autonomous Uygur Region which is bordering with south-west part of Mongolia.

In response to these events, WHO, together with other partners, has been supporting Government of Mongolia to take serious actions in preventing possible importation of the virus to the country.

Mongolia developed the national contingency and preparedness plan for wild polio virus importation aiming at maintaining high population immunity against poliomyelitis, timely detection of the infection through very functioning surveillance system and rapid response to the possible events. National Immunization Programme conducted risk assessment to identify high risk areas and carried out awareness campaign among general public and health professionals and strengthened acute flaccid paralysis (AFP) surveillance through supportive supervision and also improved capacity of polio laboratory. The country carried out two-rounds of supplementary immunization campaign for oral polio vaccine (OPV), covering children aged 5 months to 5 years old in late 2010 and early 2011, the overall coverage was 92%.

Currently Mongolia’s performance of acute flaccid paralysis surveillance meets WHO target, and the national poliomyelitis laboratory has been fully accredited by the Regional Poliomyelitis Laboratory Network.

Key achievements

- Comprehensive multi-year immunization plan 2011-2015 developed and approved.
- National contingency and preparedness plan for wild polio importation developed and approved.
- Established surveillance system for pneumococcal and rotavirus infections for preparation new vaccine introduction.
- Maintained country’s polio-free status in response to wild poliovirus importations in Russian Federation and China.
National plan on emerging diseases and public health emergencies 2012-2015 has vision to link surveillance and response with risk assessment, risk communication, public health laboratory and FETP to ensure public health security. Building upon APSED (2005) achievements, we will expand the scope from emerging diseases to other public health emergencies, including those caused by chemical agents, radioactive materials and contaminated food. To meet the IHR requirements we need to build one functioning comprehensive system, integrating existing separate capacities, and strengthening links with other programmes, such as food and chemical safety, humanitarian emergencies, thus contributing to the national and collective regional public health preparedness and response.

Surveillance, risk assessment and response
- Strengthen risk assessment capacity at all levels to enable objective, evidence based decision making
- Broaden surveillance to include non-infectious disease events (chemical, radionuclear and food safety events)
- Promote multidisciplinary and interagency coordination for surveillance, risk assessment and response
- Sustain Mongolian Field Epidemiology Training Programme

Laboratories:
- Enhance integration of laboratories and surveillance activities
- Develop public health laboratory training programme and establish public health laboratory network
- Support development of national standards on laboratory quality and standard checklist for laboratory quality standards

Zoonoses:
- Strengthen existing zoonoses coordination and collaboration mechanisms
- Strengthen risk reduction measures for priority zoonoses through collaboration with food safety and risk communications programmes
- Strengthen collaborative operational research on zoonoses

Infection prevention and Control:
- Establish mechanism to support compliance with IPC practice
- Establish national surveillance system on antimicrobial resistance
- Develop and implement evidence-based IPC policies and technical guidelines

Risk Communications:
- Strengthen pro-active risk communication capacity
- Enhance risk communications infrastructure and coordination mechanisms

Public Health emergency preparedness:
- Formulate a generic public health emergency preparedness and response plan to address emerging diseases and acute public health emergencies
- Build IHR core capacities at the Points of Entry through public health emergency planning

**Key achievement**
- Capacity of the International Food Safety Authorities Network (INFOSAN), Codex Alimentarius, risk based food safety inspection improved.

**Directions for 2012-2013**

Strengthening of capacity on food safety: Capacity for inspectors on food safety and risk based food inspection strengthened. Training guideline for risk based food safety inspection translated and checklists for it newly developed. The National Profile of food safety was developed.

Awareness on prevention and control of food borne diseases of community was raised through developed behaviour change communication and materials and broadcasted by TV programme. Draft of National Food Safety Emergency Response Plan was developed through multisectoral participation.
5. STRENGTHENING ENVIRONMENTAL HEALTH PROGRAMMES

**Inter-sectoral collaboration of health and environment:** Inter-sectoral collaboration and multi-disciplinary participation for primary prevention to tackle with root causes of environmental risk factors improved by operational six thematic working groups were established by joint order of Ministry of Health and Ministry of Nature Environment and Tourism.

Forum on environment and health and the national symposium for professionals of public health, hygienists and epidemiologists and stakeholder meeting on environmental pollution in Ulaanbaatar city was organized to improve multisectoral participation.

An action plan for second phase of the National Environmental Health Programme (NEHP) for 2011-2015 was developed in multi-sectoral participation and evidence based assessment. The National Environmental Health Profile on Environmental Health has been updated.

**Climate change and Health:** Mongolia has severe climate conditions with long, cold winters and short, hot summer. During the last 70 years, the average annual temperature has increased by 2.14°C and is projected to increase up to 50°C by the end of the 21st Century. Surface water inventory was conducted in 2007 and revealed that 852 rivers and streams out of a total of 5,128 have dried up. In addition, intensive warming would result in accelerated desertification. Currently, 78.2% of territory of Mongolia has been affected by middle and high rate decertification.

Vulnerability assessment of climate change on health effects was conducted. Based on research findings, the National Strategy and Action Plan on Climate Change and Health was developed with engagement of multisectoral partnerships in 2010.

The National Symposium on Climate Change and Health was organized annually with special objectives and focus to improve multisectoral participation and leadership of health sector on mitigation and adaptation of climate change and health effects at

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**Key achievements**

- Established six functional thematic working groups.

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**Directions for 2012-2013**

- Establish response logistics system to support outbreak and public health emergency response
- Strengthen clinical case management and health care facility preparedness and response

**Monitoring and Evaluation (M&E):**

- Strengthen national M&E capacity
- Develop progress indicators to monitor national workplan implementation
- Monitor progress in the implementation of IHR core capacities

**Vaccine Preventable Diseases (VPD):**

- Support to improve Expanded Programme on Immunization performance at a district level,
- Verify and sustain the regional goals on measles elimination and Hepatitis B control,
- Strengthen surveillance of pneumococcal and rotavirus infection for introduction of new vaccine
- Develop innovation approaches for vaccine delivery and vaccination management system and
- Strengthen epidemiologic and laboratory capacity for VPDs surveillance

**Food Safety:**

- Support the strengthening of food safety management and National Codex Team.
- Support to strengthen foodborne disease prevention and surveillance system including the integration activities under the International Food Safety to epidemic-prone diseases.
- Support standard setting and monitoring for food fortification
national and local level. Awareness on climate change and health effects was improved among health care workers and community through annual forum on climate change and health and through trainings, workshops, handbooks and behaviour change and communication materials.

Pilot study to improve water quality, to remove arsenic in drinking water supply and control of water borne diseases is being implemented in remote Gobi desert province with support from the Korean government and WHO.

**Primary Health Care training with Focus of Environmental Health and Community Based Projects**

Trainings on primary health care with focus on environmental health were conducted for health workers of 9 districts of Ulaanbaatar city, 8 provinces and 26 provincial districts. The training aimed to improve the skills of health care workers to initiate community based project on reduction and mitigation of environmental pollution and primary prevention and to engage community participation. As a result community based projects had been implemented in 15 rural hospitals on improvement of waste management, vegetable gardening for use in hospital canteen, child care and improvement of rehabilitation of disabled people.

**Water and sanitation:** Water supply was improved at 5 rural hospitals and adequate sanitation facilities constructed at 10 provincial district hospitals as model for community with support of the United Nations Trust Fund for Health Security (UNTFHS).

**Key achievements**

- Regulation on health care waste management (HCWM), standard operation procedure for safe transportation, orders on tariff setting of waste treatment and phase of mercury use in health care facilities approved
- National training programme on HCWM for 3 levels established
Capacity of 4 government officers and engineers were improved due to study tour conducted in Sweden on technical solution of rural drinking water and sanitation facilities with context of cold climate. Inter-country workshop on sanitation in cold climate countries was organized in Mongolia with technical support of WHO WPRO and presence of presenters from Korea, Japan and Kyrgyzstan. It aimed to improve inter-country and inter-sectoral collaboration, exchange experiences and study best experiences of other countries and consider on technical solution of sanitation with cold climate context. Training and advocacy materials on water safety plan were translated in Mongolian language.

Health Impact Assessment: Number of mining industries has increased by 3 times in the last decade. Officially registered 362 mining were operating in 2011. Number of employees has increased by 5 times in the last decade. It reached 50,000 employees in 2011. 30 percent of GDP has been contributed by mining sector.

Health impact assessment (HIA) is one of the main tool to reduce and mitigate mining impact on health and influence on policy, programme development.

Capacity on HIA, life cycle assessment, control and prevention of asbestos, climate change and health was strengthened by technical support of short term consultant of WHO and training for public health researchers, inspectors and government officers.

Healthy City and Healthy Workplace Initiatives: The National forum on Healthy City was conducted in May 2010 with specific objective to improve multi-sectoral collaboration and engage leadership of health sector. Training on healthy workplace for health care workers and public health officers of remote districts of Ulaanbaatar city, conducted to scale-up the healthy workplace initiatives of industrialized districts.

The Urban Health Equity Assessment and Response Tool (Urban HEART) which enables decision makers to analyze inequities in health between people living in various parts of the city and belonging to different socioeconomics groups was successfully initiated in Mongolia in 2009. Evaluation and monitoring of this pilot project was done in 2011.

Health Care Waste Management (HCWM): In Mongolia, 90.9% of health care facilities practice low-temperature combustion of health care. Study findings have shown high rates of sharp injuries (86.8%) and prevalence of hepatitis B (28.4%) and C (20.1%) among health care workers.

The National Strategy and Action Plan on HCWM were endorsed in 2009. It promoted non-incineration technology and common treatment facilities for treatment and disposal of health care wastes in cities. Regulation on HCWM revised in line with National Strategy. Three-level training programme on HCWM was developed: basic training for health care waste technician, secondary level training for health care waste officer and tertiary level training for health care waste managers. Total of 30 hygienists and hospital epidemiologists from clinical hospitals of Ulaanbaatar city and 30 rural health care workers were trained.

The government commitment increased and regular fund for health care waste management secured and resources were mobilized for procurement of centralized facility for treatment and disposal of health care wastes for three biggest cities: Ulaanbaatar, Darkhan and Erdenet.

Pilot project to improve HCWM at hospital level has been implemented at the National Centers for Cancer and Dermatology. Sharp waste management, labelling and awareness of health care workers improved at hospital level. Mercury free hospital project successfully initiated in Central Clinical Hospital. Visual training on safe management of mercury spillage and fact sheet on baseline study findings of use of mercury containing equipment in health care facilities developed and distributed to hospitals. Additional resources were mobilized from the United Nations Trust Funds for Human Security (UNTFHS) to procure basic supplies and equipment for sound health care waste management to target 26 provincial district hospitals in 2010-2011.
Directions for 2012-2013

- Support the development and implementation of national climate change and health strategies, policies and plans.
- Support capacity-building of health and related sectors to mitigate the effects of climate change on health.
- Support the expansion of provision of safe water and adequate sanitation in health care facilities.
- Support the development and implementation of policies on water quality and sanitation, and promote community based activities.
- Provide support to strengthen environmental hazard management and health impact assessment.
- Provide support to strengthen management of health care waste, chemical safety and occupational health.

ORGANIZATIONAL CHART OF WHO MONGOLIA

Dr Wiwat Rojanapithayakorn, WHO Representative

Health System Development & NCD (NCD/ HSD/ EHH/ MCN/ HCF)
- Dr Govind, Team Leader, Public Health Specialist
- Dr B. Tsogzolmaa, Technical Officer/ NCD
- Dr L. Oyuntogos, Technical Officer/ EHH
- Dr E. Erdenechimeg, Technical Officer/ HCF
- Dr D. Narantuya, Technical Officer/ SHD
- Dr B. Altanzagas, Technical Officer/ WSH & PHC
- Ms Z. Zolzaya, Communication and Health Promotion Officer
- Ms Ch. Munkhzhul, Secretary to HSD team
- Ms D. Gantuya, Secretary to SHD
- Mr V. Bayasgalan, Driver, WSH & PHC

Health Security & CD (ESR/ HIV/ STIs/ STB/ IVD/ MVP)
- Dr Luo Dapeng, Team Leader, Medical Officer/ ESR
- Dr D. Sodbayar, Technical Officer/ EPI
- Dr J. Narantuya, Technical Officer/ HIV/ AIDS/ TB
- Dr O. Ariuntuya, Project Officer/ ESR
- Dr P. Enkhtuya, Project Officer/ FETP
- Dr E. Temuulen, Project Assistant/ FETP
- Ms Sh. Odonchimeg, Secretary to ESR team

Administration & Finance (Admin/ HR/ Fin)
- Ms B. Bat-Erdene, Team Leader, Administrative Assistant
- Ms B. Unurjargal, Administrative Assistant
- Ms J. Shagjtsersen, Secretary
- Ms Ts. Baasankhuu, Accounts Assistant
- Mr B. Shijir, Driver to WR
- Mr D. Narandash, Driver
- Mr D. Batmanlai, Driver
- Ms B. Bolortsetseg, Cleaner
WHO Mongolia has been quite successful in mobilization of additional resources to support country programmes. During 2010-2011, funds of US$ 2.5 million from United Nation Trust Fund for Human Security (UNTFHS), Millenium Challenge Account (MCA), The Arab Gulf Program for Development (AGFUND) etc. were mobilized totally.

To mention few examples, in 2008, Mongolia entered into a compact with the Millenium Challenge Corporation of the United States Government, which included US$ 39.1 million for the Health Project on Prevention and Control of NCDs and Road traffic injuries. The Center for Excellence for Stroke and Heart disease linking primary health care facilities, district and province hospitals were established with the technical support from WHO and funding support of US$ 1.2 million from MCA.

Also, during the pandemic influenza A(H1N1), WHO Mongolia mobilized US$200,000 from USAID for operational cost of pandemic mass vaccination campaign (such as vaccine dispatch, outreach vaccination, training for HCWs, communication, supportive supervision) through DELIVER project by developing a proposal.

As for capacity building, WHO country office staff organized a staff retreat to learn about Resource Mobilization during 6-7 January 2012. In the workshop staff learnt on recourse mobilization principles, communication skills with donors in writing and in person and donor mapping. Many proposals are now being developed to be submitted to donors for possible funding in priority areas.

From 1 January to 1 April 2012, 17 proposals for US$ 4.5 million submitted to donors; and 7 proposals (US$ 694,500) were already approved.
MAJOR PUBLIC HEALTH EVENTS

• Launching of the STEPS survey
On 23 February, The Mongolian STEPS Survey report on the Prevalence of Noncommunicable Diseases (NCD) and Injury Risk Factors, conducted under WHO guidance, was launched and disseminated to all relevant stakeholders. The report drew high attention because of the linkage with the global movement towards UN High Level Meeting on NCD later this year.

The survey result shows that the most common risk factors to NCD did not reduce within the last 5 years period. For example: tobacco use among both males and females was still 30 percent, alcohol consumption was 58 percent, very low daily consumption of fruits and vegetables; high percentage of overweight population (up to 40 percent) and rising prevalence of glucose intolerance.

• Launching of Ministry of Health - WHO - MCA project on Stroke and heart attack
On 15 March, The Heart Attack and Stroke project executed by WHO was officially launched its operation. Within the framework of the project, Millennium Challenge Account (MCA) - Mongolia and WHO will provide assistance to improve national decision making on appropriate policies, protocols and acute disease responses in the areas of stroke and heart diseases.

• Climate Change and Vector Borne Diseases
On 15 March, A project on Strengthening Control for Vector Borne Infectious Diseases to Lessen Impact of Climate Change, supported by KOICA has started its implementation in Mongolia. It began with the inception meeting to agree on Terms of Reference of members of inter-sectoral taskforce and to reach consensus on planning, timing and expected outputs and outcomes. This theme of the project is very relevant with Mongolian uniqueness of nomadic lifestyle, heavy reliance on herding and agriculture, traditional diets of consuming meat of hunted animals’ meat like marmots and use of hunted animals' skin.

• World Health Day on 7 April, 2011
World Health Day was celebrated widely in Mongolia, in collaboration with Ministry of Health, HSUM and civil society organizations to improve policy makers' and the public’s awareness of the dangers of antimicrobial drug resistance and ways to promote proper use of drugs and strengthen the control of drug importation and sale. A joint press conference of WHO and Ministry of Health was organized to draw the government, health professionals, public and patients' attention to the most critical problems related to drug resistance, hospital acquired “super bugs” and causes of emergence and re-emergence of diseases.

• High-level NCD meeting
On 9 April, a briefing on noncommunicable diseases prevention and control was organized for high level officials from Ministries of Health, Finance and Foreign Affairs and President’s office in preparation for the UN high level meeting on NCD in September and also the global forum on NCD in Moscow in April.

• Launching of RED strategy
The Minister of Health issued an order in April to implement the Reaching Every District (RED) strategy in the framework of Health Sector Strengthening approach. The country has implemented RED strategy in 7 districts of UB and in 2 districts between 2010 and 2012. Beyond 2012, the country will introduce RED strategy in a phase-based manner to whole country. Thanks to the successful implementation of the RED strategy, a package for health and social services will be provided to mothers and children living in the most isolated areas through the immunization service system. The RED strategy launching took place during the opening ceremony of the National Immunization Day, 17 May 2011 with participation of Ministry of Health, UNICEF, WHO and JICA Representatives in Mongolia.
• The 90th anniversary of the establishment of the health sector in Mongolia

On 24 June, 90th year anniversary of the establishment of the health sector was widely celebrated with many important events to get encouragement from the achievements, review and reflect the lessons learnt during the last 9 decades. The main event was the celebration in the main hall of the National Cultural Theatre in which the Prime Minister of Mongolia and WHO Representative delivered the addresses, followed by presentation on the achievements of the health sector in Mongolia in the past 90 years. The most highlights were given to the increased life expectancy at birth of Mongolians from 42 years during early 1950s to 68 years last year, progressive changes meeting Millennium Development Goals for maternal and child health, and declining trends in the prevalence of many communicable diseases as biggest achievements performed in public health with enormous efforts of all partners. Also, Mongolian government and Ministry of health committed to work to consolidate the outcomes and achievement of the previous years and improve the diagnostic and therapeutic capacity as well as enhance quality and excessiveness of the health care at par with international standard and adopt advanced technology and highly sensitive equipments.

• National Conference on NCD

The conference was conducted on 8 September with participation of several stakeholders to discuss the current situation on NCD and risk factors and the responses that have been undertaken through various programmes and programmes including the MCA large scale project on NCD. This was a timely event leading to the UN high level meeting on NCD in New York at which the President of Mongolia and the Minister of Health participated.

• Healthy Cities and integration of prevention and control of NCD

Above was the subject of a healthy cities workshop conducted in Darkhan city in mid-September attended by local governors' staff from five provinces together with health, education, transport, police and other sector staff. This meeting was a follow-up from the Shanghai meeting on healthy cities and NCD at which multisectoral staff from Mongolia participated. Several activities such as road traffic accident prevention, tobacco control, NCD risk factor reduction at work places etc were discussed and action plan developed for implementation.

• National salt consumption survey

As partnering with the Public Health Institution of Mongolia, WHO has been facilitating a process of the nation-wide survey to identify salt content in 24 hours’ urine.

• Launching of the survey

The Mongolian Forth National Nutrition Survey, conducted under WHO guidance, was launched and disseminated to all relevant stakeholders on 25 October, 2011. The survey result shows that the level of early initiation of breastfeeding is 85.5 percent and breastfeeding for a year level was 74 per cent. In regard to child growth, the country has a good progress in reducing underweight, while 15.6% of the surveyed children under 5 were stunted, 1.8% were with wasting, and 4.7% with underweight.

• HIV/AIDS Day

Mongolia marked World AIDS Day on 1 December 2011. The National Committee on AIDS in collaboration with UN agencies organized a press conference where the Bakharkhaliin Award on HIV/AIDS, a new national award by Government was given to recognise the work of an individual and a civil society organisation in reducing HIV/AIDS in Mongolia. The award aims to highlight that improved health cannot be achieved without basic human rights and these rights are meaningless without adequate health.

• Field Epidemiology Training Programme

Mongolian FETP based in National Centre of Communicable Diseases has been successfully implemented with a vision to produce public health professionals to feed the health system on regular basis. Ministry of Health, NCCD and WHO cooperatively celebrated MFETP of graduation and welcoming ceremony in December, 2011. Ten students of the second cohort of FETP graduated the programme and welcomed 6 new trainees for the third cohort of FETP, which is starting in January, 2012.
OTHER MAJOR ISSUES

- Changed legal environment in health sector
  In order to adjust and respond to the most recent socio-economic conditions, and needs and demands of the public health service, a new legal environment has been creating. The renewal of the Health law was adopted by Mongolian Parliament on May 04, 2011 and it is now in effect. Revision on Health law and Medicine and Medical equipment and amendments into Law on Immunization, Law on Government special funding, Excise tax law, Law on Control of Psychotropic substances circulation and Law on Psychical Activity and State policy on Promoting Physical Activity were developed and adopted by the Parliament.
  Revised draft laws on Civil Health Insurance and Mental Health and draft amendments in Tobacco Control Law and Donor law were developed and have been submitted to the Parliament.

- Stakeholders agreed to a proposal from Ministry of Health for the mid-term review of the National Health Sector Master Plan with the objectives of prioritizing the plan, achieving the health related Millennium Development Goals’s and mobilizing additional resources to fill in the gaps. WHO technical support as well as a partial funding support from regional office and HQ was solicited.

- Final UNDAF 2011-2016 document was officially signed by the government and heads of all UN agencies on 17 March 2011. UNDAF has incorporated several WHO strategic priority areas to be implemented during the time frame.

- Health cluster meeting; WHO Country office in Mongolia leads Health Cluster in Mongolia. WHO as partnering Ministry of Health organized a workshop on Health Cluster and Rapid Assessment. It was considered timely because during winter months, Zud disasters frequently occur. So it was useful to build capacity of member of organizations and to improve the disaster preparedness to provide rapid response and assessment to mitigate serious effects to people.

- WHO country office staff organized a staff retreat to learn about Resource Mobilization. Proposals are now being developed to be submitted to donors for possible funding in priority areas.

- Mid-term review of the National Health Sector Master Plan was conducted with leadership and ownership of Ministry of Health with full participation of stakeholders through interaction at steering committee and working group level. Draft report now being circulated to stakeholders for their final input.

ACKNOWLEDGEMENT

Our progress could only happen with the efforts and support provided by our donors and partners, listed here in alphabetical order:

ADB (health system strengthening; the fourth project); AusAID (pandemic influenza, Asia Pacific Strategy on Emerging Diseases); GAVI (immunization, health system strengthening and health care waste management); Global Fund (tuberculosis, HIV/AIDS and HSS); the Government of Japan (preparedness against avian flu, M FETP); the Government of Korea (environmental health); KOICA (climate change, vector borne diseases); MCA (stroke and heart attack); Norwegian Lutheran Mission; UNAIDS; UNDP; UNFPA; UNICEF; UNTFHS (water and sanitation, primary health care); USAID (Pandemic Influenza response and logistic support); US CDC (pandemic influenza, Asia Pacific Strategy on Emerging Diseases, immunization); World Bank (pandemic influenza and emerging diseases); World Vision (tuberculosis)
## HEALTH AND SOCIO-ECONOMIC INDICATORS

### Selected Indicators for Mongolia, 2011

<table>
<thead>
<tr>
<th>Category</th>
<th>Value</th>
<th>Sources</th>
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<tbody>
<tr>
<td><strong>DEMOGRAPHIC INDICATORS</strong></td>
<td></td>
<td></td>
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<tr>
<td>Total Population Size</td>
<td>2,780,750</td>
<td>Health Indicators 2010</td>
</tr>
<tr>
<td>Population growth rate</td>
<td>1.70</td>
<td>Health Indicators 2010</td>
</tr>
<tr>
<td>Crude Birth Rate/1,000 population</td>
<td>23.80</td>
<td>Health Indicators 2010</td>
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<tr>
<td>Crude Death Rate/1,000 population</td>
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<td>Health Indicators 2010</td>
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<tr>
<td>Total Fertility rate (women aged 15- 49 years)</td>
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<td>Health Indicators 2010</td>
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<tr>
<td>Average household size</td>
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<td>Population Census 2010</td>
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<tr>
<td><strong>HEALTH INDICATORS</strong></td>
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<td></td>
</tr>
<tr>
<td>Infant Mortality Rate/1,000 live births</td>
<td>19.40</td>
<td>Health Indicators 2010</td>
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<tr>
<td>Under Five Mortality Rate/1,000 live births</td>
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<td>Maternal Mortality Ratio/100,000 live births</td>
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<tr>
<td>Life expectancy at birth</td>
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<td><strong>HEALTH SERVICE INDICATORS</strong></td>
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<tr>
<td>Physicians/1,000 population</td>
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<td>Dentists/1,000 population</td>
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<td>Pharmacists/1,000 population</td>
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<td>Nurses/1,000 population</td>
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<td>Midwives/1,000 population</td>
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<tr>
<td>Primary Health Care Centers</td>
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<tr>
<td>Immunization coverage for infants (%) for DTP3</td>
<td>96.10</td>
<td>WPRO 2010</td>
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<td>National DTP-HepB-Hib drop out rate</td>
<td>0.9</td>
<td>WHO-UNICEF JRF 2011</td>
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<td>Antenatal care coverage (At least four visits)</td>
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<tr>
<td>% of births attended by skilled health personnel</td>
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<tr>
<td>% of deliveries in health facilities (as % of total deliveries)</td>
<td>99.51</td>
<td>Health Indicators 2010</td>
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<td><strong>SOCIO-ECONOMIC INDICATORS</strong></td>
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<tr>
<td>Total expenditure on health as % of GDP</td>
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<td>General government expenditure on health as % of total government expenditure</td>
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<td>Per Capita GDP (US$)</td>
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<td>Health insurance coverage as % of total population</td>
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<td>Adult literacy rate (%)</td>
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<td>Proportion of the population using improved sanitation facilities</td>
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<td>GMP-WHO UNICEF, 2010</td>
</tr>
<tr>
<td>Proportion of the population using improved drinking water sources</td>
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<td>GMP-WHO UNICEF, 2010</td>
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