Highlights:

The torrential rains in the country due to typhoon Lionrock hitting the north east coast of DPR Korea have led to flash floods and landslides. The main areas affected in the North Hamgyong Province, are Musan County, Yonsa county, Hoeryong city which are heavily affected and Kyongwon county, Kyongsong county, and Onsong country of North Hamgyong province. Few other adjacent counties along the Tuman river in North Hamgyong and Ryanggang provinces were also affected.

Flash floods were reported on 29 August when the typhoon Lionrock created a low pressure area over the northwestern part of the country. Immediate relief measures have been taken by the national government with the support of international agencies.

Affected area and incident site mapping:
Health Sector Situation Report (1)  
DPR Korea Floods  
14 September 2016

Situation Analysis:

**The Joint Assessment Mission** comprising of three government officials and 20 UN Humanitarian Country Team representatives from all UN agencies, including WHO, from IFRC and different EUPS units have visited the affected areas from 6 September till 9 September 2016. The following are the key findings:

- Situation more severe than originally reported in scale and complexity and complete data was still missing. More information is needed about the situation in Yonsa and neighboring counties in Ryanggan province.
- A larger number of people in North Hamgyong province will be vulnerable due to breakdown in water, health and basic services as well as loss of crop and livestock. They may also become fully public distribution system (PDS) dependent.
- The gravity-fed water system is estimated to have been 80 per cent washed away. People are depending on the river and a few wells with hand pumps for water, which is likely to be contaminated. According to authorities, people have been advised to boil the water, but with scarcity of fuel, this is not likely to happen. The assessment team estimated that the water quantity is sufficient in at least one location (Kang An Dong), but that it is probable that the quality of water is unsafe for drinking and cooking. An area of concern is the provision of proper water quality testing equipment.
- Prevailing data on widespread breach of water supply system and compromised sanitation, with vast devastation of houses, and rapidly approaching severe winter in the area indicate that, there is significant risk of widespread outbreaks of communicable diseases especially of diarrhoea and acute respiratory illnesses (ARI) which could lead to significant morbidities and mortalities especially among vulnerable population (children, elderly and pregnant women). Food security/Nutrition is largely dependent upon the relief packages and supplies to the population, which is reported to be well organized. There are chances of long term dependency of population on PDS for the loss in the personal sources of food supply of the affected population.
- Health and health facilities are reported to be hit severely in the floods with reports of significant shortages of medicines and equipment. Reports available till date indicates that out of 266 health facilities in the worst affected 6 counties, 45 have been damaged or destroyed.

Casualties and damages:

According to the latest government report, 538 people have died or are missing in affected areas. Currently estimated number of displaced population is 70,000 with a total of 600,000 known to be affected so far. The loss to the infrastructure is yet to be assessed as the large affected area is yet to be...
accessed. The assessment team visited several affected areas but could not reach Musan and Yonsa (the worst affected areas in the floods).

- 600,000 people face water supply shortages in more than 6 counties.
- 35,500 houses have been damaged, of which 24,495 houses are completely destroyed.
- 8,700 public buildings, including schools, have been damaged.
- Cases of injuries, diarrhea and respiratory illnesses were reported from the area.

Response:

a) National Government:
The national government is carrying out the relief measures to the affected population by relocating the affected people to the safer places and arranging for the temporary camps with proper provisions of food, water and sanitation facilities. The effort to reach to the affected population has been a challenge. The government had sent food supplies and radios for better communication. MOFA/NCC National Coordination Committee) is the coordinating agency with UN for the emergency.

b) WHO:
WCO has coordinated with MOPH, UN agencies and health sector partners. WHO has provided a stockpile of emergency kits and medicines along with other related medical items. Two WHO officers were part of the Joint Assessment Mission. The Ministry of Health has requested for USD 175,000 from the WHO South-East Asia Regional Health Emergency Fund and this has been approved within 24 hours.

c) UN and International Agencies:
The Humanitarian Country Team has already discussed its humanitarian response towards the affected population and is in the process of delivering a coordinated response. WFP is distributing the food materials in the flood affected areas whereas IFRC has arranged shelter kits for the flood affected areas along with the national government. Water purification kits and tablets have also been supplied by UNICEF. WCO has sent emergency supplies which includes comprehensive and basic emergency kits, diarrhoal kits, water testing kits and water filters, and few oxygen concentrators. UNICEF has already released six comprehensive and 50 basic emergency kits along with ORS, and clean delivery kits while UNFPA has released 50 dignity kits.

Evolving Needs:

- A comprehensive assessment of the situation will be needed to identify priority needs that can be supported by the international community.
- Coordinated national and cross border efforts to relief and rehabilitation inclusive of provision of delivery of relief material by rail and air in the affected areas which are inaccessible by road.
• Food security, temporary settlement/facilities, constant supply of fuel and alternative fuel supplies, access to potable water, provision of water purification tablets, bandages and medicines for the affected population for immediate relief. The approaching winter season is to be kept in mind while assessing the long term needs.
• Restoration of damaged health facilities and related infrastructure including shelter facilities for the coming winter season. There is a need for the provision for primary health needs for around 160,000 people for next six months.

The health sector partners in DPR Korea have come up with the following goals for the health response:

1. No person including children or pregnant mothers in affected areas should die of communicable diseases or during child birth.
2. The health system in affected areas is adequately prepared for early detection, response and control of any outbreaks of diarrhoeal diseases, acute respiratory tract infections or measles among the affected population.
3. The basic, primary level health care services should be made available to people at the affected areas.
4. The specific health needs of vulnerable groups including children, pregnant and breastfeeding mothers, elderly population and people with disabilities in the affected areas are identified and met.

Further Actions:

• Review of the need to conduct catch up vaccination campaigns to ensure vaccination of all eligible children and mothers who may have missed scheduled vaccination due to the floods
• The ‘Communicable Disease Surveillance and Response System’ in affected counties (special emphasis on measles) further strengthened
• Implementation of the MISP (Minimum Initial Service Package, including RH kits and dignity kits) for Reproductive Health in Emergencies
• Safe water and sanitation in all health facilities of affected counties.
• Medicines including basic antibiotics, ORS and basic equipment needed to manage diarrhoeal diseases and ARIs available in all health facilities of affected counties.
• ‘Hospital tents’ with basic equipment including heating system and lifesaving medicines are established and functional on sites where the Ri clinics/Ri hospitals are damaged or destroyed.
• House Hold Doctors in the affected area are equipped with HHD kits.
Important Contacts:

### DPR Korea Office

<table>
<thead>
<tr>
<th>No</th>
<th>Name</th>
<th>Designation</th>
<th>Phone</th>
<th>Fax</th>
<th>Email Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Mr. Tapan Mishra</td>
<td>UN Resident Coordinator</td>
<td>381-7771/2/3/4</td>
<td></td>
<td><a href="mailto:Tapan.mishra@one.un.org">Tapan.mishra@one.un.org</a></td>
</tr>
<tr>
<td>2</td>
<td>Marina Throne-Holst</td>
<td>Coordination officer(OCHA)</td>
<td>381-7772/3/4</td>
<td>Ext. 205</td>
<td><a href="mailto:Throne-holst@un.org">Throne-holst@un.org</a></td>
</tr>
</tbody>
</table>

### EHA - WHO DPR Korea

<table>
<thead>
<tr>
<th>No</th>
<th>Name</th>
<th>Designation</th>
<th>Phone</th>
<th>Fax</th>
<th>Email Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Dr. Thushara Fernando</td>
<td>WR</td>
<td>+850-2-381-7913</td>
<td>+85023817916</td>
<td><a href="mailto:fernandot@who.int">fernandot@who.int</a></td>
</tr>
<tr>
<td>2</td>
<td>Dr. Zobaidul Haque Khan</td>
<td>Medical officer, CDS</td>
<td>381-7913/4</td>
<td></td>
<td><a href="mailto:khanzo@who.int">khanzo@who.int</a></td>
</tr>
<tr>
<td>3</td>
<td>Dr. Kim Kum Ran</td>
<td>NPO</td>
<td>381-7913/4</td>
<td></td>
<td><a href="mailto:Kimku@who.int">Kimku@who.int</a></td>
</tr>
</tbody>
</table>

Sources of Information:

- [https://www.youtube.com/watch?v=zDcJL78sW6Y](https://www.youtube.com/watch?v=zDcJL78sW6Y)
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