

Mid-Year Report 01 January through 31 July 2018

Papua New Guinea

Humanitarian Situation Report No. 6



SITUATION IN NUMBERS

Highlights

- During the first half of 2018, the humanitarian situation in Papua New Guinea (PNG) deteriorated and remains grim due to three States of Emergency in PNG: Earthquake disaster for 4 provinces; Peace and Security for Southern Highlands; Public Health emergency due to polio outbreak.
- UNICEF's has reached over 37,000 children with measles and rubella vaccinations, 23,000 children with micronutrient powder; 64,000 people have been given access to safe drinking water.
- UNICEF is supporting the Government to respond to the polio outbreak. UNICEF is procuring over a million oral polio vaccines. In the first of four vaccination rounds, some 306,000 children have been vaccinated.
- Close to 400 child protection duty bearers, nurses, vaccinators, nutrition workers and other community health workers, teachers all trained on disaster recovery measures and back at work
- UNICEF has procured and managed 118.79 metric tons or 481.65 cubic meters of emergency education, health, nutrition, protection, water, Funding Status 2018 and sanitation supplies for direct delivery, delivery through partners or as government-controlled supplies. The total value of procurement for emergency supplies and related services is over US\$ 822,000.

01 January - 31 July 2018

544,000 people affected earthquakes, including 252,480 children

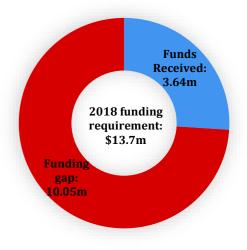
270,000 people need immediate life-saving assistance, including **125,000** children

Funding requirement for 2018 as part of the regional humanitarian appeal: US\$13.7 million.

Funds received: US\$3.64 million

UNICEF's Response with Partners

| | UN | ICEF | Sector/Cluster | |
|--|------------------|------------------|-------------------|------------------|
| | UNICEF Target | Total Results | Cluster Target | Total Results |
| Nutrition: Children 6 to 59 months old receiving micronutrient powder | 32,000 | 23,581 | 32,000 | 23,581 |
| Health: Children (o-59 months) who received MR vaccination | 40,000 | 37,942 | 79,400 | 61,859 |
| WASH: People who have access to safe drinking water | 75,000 | 64,017 | 270,000 | n/a |
| Child Protection: Children reached with psychosocial support services | 15,000 | 5,501 | 15,000 | 5,501 |
| Education: Number of children (3-14 yrs) who are enrolled in STLS for non-formal education, including early learning | 10,000 | 8,674 | 10,000 | 3,914 |



Situation Overview and Humanitarian Needs

On 5 January 2018 Kadovar Island volcano began erupting, continuing for weeks with lava covering 60% of the entire island. The population of the island fled to a nearby island, residing in overcrowded conditions. Eventually, they were moved by boat to the large, main island of PNG and re-located in five groups at a location known as Dandan Care Centre in East Sepik Province. Population numbers have fluctuated between approximately 550-640. Plans to resettle the internally displaced population to a larger more liveable area have stalled. The most recent assessment in May 2018 predicted that when NGO funding was finished there would be a worsening of already poor and risky living conditions.

On 26 February 2018, the Highlands Region was struck by a 7.5 magnitude earthquake – the first of several major quakes of 6.0 or greater magnitude and hundreds of still ongoing tremors. The earthquakes caused widespread destruction across Hela, Southern Highlands, Western and Enga Provinces. Families lost homes, water sources, health facilities, schools and subsistence family farms/gardens. According to the inter-agency Disaster Management Team (DMT) response plan, 544,000 people (with 46 percent children under 18) were affected, of which 270,000 people, including 125,000 children, were estimated to be in need of immediate need of life-saving assistance. The Humanitarian Response plan targeted seven local governance areas in Hela and the Southern Highlands Provinces.

In April, violence in Tari and other parts of Hela Province led to UN staff being moved from the Province. On 14 June, violence erupted in Mendi, the provincial capital town of Southern Highlands Province. UN staff that had been working from Mendi were moved to Mt Hagen in the neighbouring Western Highlands Province. PNG Defence Forces were deployed and remain in both Provinces. Humanitarian work continued in some peaceful areas of Southern Highlands, but work was particularly delayed in the worst affected areas of Southern Highlands and in all of Hela Province due to access restrictions for the UN in both Hela and Southern Highlands Provinces. Until mid-July 2018, humanitarian assistance was restricted to only food and supply deliveries. However, the response scaled up after mid -July with an improving security situation. In late June, a Public Health Emergency was declared initially for three Provinces but now extending to a national outbreak response. Currently, there are three overlapping States of Emergency in PNG. There have also been outbreaks of measles and pertussis that triggered urgent, localised special immunisation campaigns. However, safe access for responses has been expanding – although local negotiations and/or military escorts are required in many areas.

| Estimated Population Affected and in Need of Humanitarian Assistance following Earthquakes (Interagency Response plan dated 28 March 2018) Start of humanitarian response: 1st March 2018 | | | | | |
|---|---------|---------|---------|--|--|
| | Total | Male | Female | | |
| Total Population in Need | 544,368 | 280,680 | 263,688 | | |
| Children (Under 18) | 252,480 | 129,656 | 121,824 | | |
| Children Under Five | 70,767 | 36,488 | 34,279 | | |
| Children o to 11 months | 17,419 | 9,058 | 8,361 | | |

Humanitarian Leadership and Coordination

The Kadovar Island volcano and population displacement response is led by the East Sepik Provincial Government with support from the National Government and the inter-agency Disaster Management Coordination Office and Team. (DMC/DMT). The earthquake humanitarian response is led by the National Government through a Disaster Controller supported by the DMC/DMT. The Southern Highlands and Hela Provincial Disaster Coordination offices and the PNG Defence Forces coordinate and support earthquake relief work in the Provinces. Since the suspension of the Office of Governor and Provincial Administrator in Southern Highlands Province, the response to conflict is led by a Disaster Controller who is the acting Provincial Administrator. The response to the polio outbreak is led by the National Department of Health, supported by WHO and UNICEF, and implemented by emergency operations centres at Provincial Departments of Health.

UNICEF remains actively engaged in the following humanitarian coordination through Government-led Clusters: Health and Nutrition, WASH, Education, Protection (including gender-based violence and child protection). Cluster membership and coordinated action in PNG includes private sector oil and gas companies, as well as UN, NGOs, FBOs and others. A high-level UN Mission, including the Resident Coordinator, the UNICEF Representative and other UN leaders visited Mendi and Ialibu in Southern Highlands on 24-25 June to understand the changing situation there, and to reinforce continued UN support for remaining relief needs and for resilient recovery leading to sustainable peace and development.

Humanitarian Strategy

The inter-agency strategic objectives agreed by the DMT in its Humanitarian Response Plan include:

- i) provision of life-saving assistance to affected population and re-establishment of basic services;
- ii) support restoration of livelihoods and self-reliance; and
- iii) provision of safety and protection for vulnerable people, including children and women.

UNICEF is contributing to the objectives in the March 2018 Humanitarian Response to Earthquake Plan through integrated maternal and child health; access to safe water, sanitation and hygiene education; children's access to safe learning spaces for early, elementary and primary education; psychosocial support for children and parenting education for caregivers of children. UNICEF is working through multi sectoral national and provincial governments and with local FBOs that have long-standing operational presence and trust within the affected communities. UNICEF, UNFPA and UN Women are implementing a joint UN relief and recovery programme called Learning, Empowerment and Protection for women and children.

Subsequent to the early rapid assessments and formulation of the humanitarian response strategy and plan, UNICEF and partners, as well as other humanitarian actors, carried out more in-depth assessments of needs and identified a larger number of Local Level Governance (LLG) areas where children need humanitarian assistance. A series of real time reviews in June 2018 showed that UNICEF had reached 13 LLG areas (compared to the seven included in the Response Plan), however, unfortunately insecurity resulted in only a relatively small amount being done in LLGs in Hela Province. Subsequently, the response strategy was adjusted to re-gain humanitarian access to selected areas of Hela Province and scale up responses in all sectors wherever possible. UNICEF's humanitarian strategy was also adapted towards more direct implementation and government partnership.

In response to the Public Health Emergency declared due to confirmation of vaccine-derived polio cases, the National Department of Health along with WHO, UNICEF and other Global Polio Eradication partners are implementing an outbreak response plan. This includes strengthening of Acute Flaccid Paralysis surveillance, strengthening of routine immunization and polio Supplementary Immunization Activities (SIA). Round 1 of the SIA will be concluded in early August in the three high risk provinces of Eastern Highland, Madang and Morobe. Round 2 will target more than 700,000 children under 5 years of age. Rounds 3 and 4 will be conducted in the remainder of the nation in September and October 2018.

Meanwhile, in response to outbreaks of measles and pertussis, and surges in malaria cases, provincial level responses to intensify facility-based and outreach vaccination and mosquito net distribution are also ongoing. In Hela Province, this emergency response to measles has been integrated into the UNICEF supported integrated maternal and child health campaign.

Summary Analysis of Programme Response

Health

Following confirmation of several vaccine-derived polio cases, on 26 June, the National Executive Council declared a Public Health Emergency for three provinces, which was extended to six more provinces – including earthquake and conflict affected provinces. Despite a national stock-out of polio vaccine, emergency supplies were procured, shipped and delivered so that emergency vaccination campaigns could be carried out in August. In mid-August a decision was

made to conduct nationwide rounds 2 and 3 of the campaign. UNICEF is procuring more than 4 million doses of polio vaccine as well as contributing to planning and social mobilization. 306,000 children under age 5 were vaccinated against oral polio vaccine in Round 1 whereas Round 2 will be conducted in 9 provinces: Eastern Highlands, Madang, Morobe, Western Highlands, Hela, Chimbu, Jiwaka, Enga and Southern Highlands, starting from 20 August.

The UNICEF health response to the earthquakes in the Highlands Region was planned and implemented in close coordination and collaboration with the National Department of Health and WHO. Despite periods of violence that prevented consistent access to health facilities and target populations, all maternal and child health supplies have been delivered, new refrigerators installed to preserve vaccine cold chain, and the immunisation activities are completed in Southern Highlands and nearing completion in Hela Province. Refresher training on safe delivery and emergency neonatal care was conducted in both Provinces. There are some remaining target health facilities and populations yet to be reached in Hela Province, and data collection from remote health facilities and staff has proved to be challenging for reporting on indicators. Meanwhile, the earthquake affected Provincial Departments of Health have also received help to respond to outbreaks of measles, pertussis and malaria. In UNICEF supported districts of Southern Highlands and Hela Provinces, over 11,700 children were vaccinated with pentavalent vaccine; more than 37,000 with measles-rubella vaccine, and around 28,855 women have received tetanus-toxoid vaccination. Other vaccinations given include polio, BCG, Hepatitis B and pneumococcal vaccines. The campaigns were carried out with hygiene promotion sessions, and nutrition activities and services. Emergency supplies were distributed that assisted in the safe delivery of over 200 babies, antenatal care for over 1,000 pregnant women and monitoring of hypothermia in low birth weight new-borns.

Nutrition

The nutrition response kicked off since mid-April. The approach in both the provinces was an integrated maternal and child health and nutrition campaign which was followed up in Southern Highlands with additional nutrition training and more outreach work. Thus, progress in Southern Highlands has been steady despite some work stoppages due to serious outbreaks of violence in June. Work in Hela Province could only begin in mid-July due to conflict and security concerns. It was a major accomplishment to launch the campaign in Hela Province in a context that continues to be complex and challenging, with a large percentage of the population having received very limited health care service and no nutrition service for decades. Stunting prevalence is officially 55%, and perhaps it is much higher in remoter parts of Southern Highlands and Hela. Health and nutrition outreach work continues in both Provinces.

Overall 21,566 children ages 6 to 59 months were screened for malnutrition and out of which 650 children were identified and treated for severe or moderately acute malnutrition. Moreover, over 22,000 children 6-59 months in earthquake affected areas were provided with vitamin A and deworming tablets, 23,581 children received a one to three-month supply of micro-nutrient powder. Around 31,000 pregnant and or lactating women were counselled on infant and young child feeding, including those who also watched gardening and cooking demonstrations. In addition, 203 community health workers were trained on screening and management of MAM and SAM to provide quality nutrition services. To ensure continuity in nutrition service provision, supplies were airlifted to the Highlands and then transported to hospitals and rural health facilities

Water, Sanitation and Hygiene (WASH)

UNICEF's emergency WASH response is integrated into the child protection, education, health and nutrition projects, and there are also stand-alone activities, such as reaching displaced people with water purification tablets and collapsible water containers in the early months of the emergency response. Water quality testing has consistently showed that all water sources -including tanks of rainwater - are highly contaminated with bacteria. Cumulatively, UNICEF has reached more than 64,000 people with access to safe drinking water- through water purification tablets, water filters for health facilities, and repairs to rain water harvesting systems at community churches and schools. Repairs and improvements ("build back better") to latrines and rainwater harvesting systems are three-quarters completed at the initially assessed and targeted schools and child friendly spaces in Southern Highlands Province. Work in Hela Province could only begin in June, with partner ADRA leading the way in areas which are still not security-cleared for access by UN staff. More than 11,000 girls and boys (plus their teachers) have access to new, improved latrines at their earthquake damaged schools

and/or at child friendly spaces. WASH messages are integrated into community health worker training, and are part of the activities at child friendly spaces and temporary learning spaces. These messages and demonstrations are also included in the health and nutrition integrated outreach campaigns. As a result, almost 57,000 adults and children have listened to messages and other information on the importance of ending open defectation, boiling or otherwise purifying water and practicing good hygiene. The Education Cannot Wait emergency response and recovery project which started in mid-July, also integrates WASH learning and activities, and this will continue through the first quarter of 2019, at 67 schools in Southern Highlands and Hela Provinces.

The WASH Cluster continues to meet at national level, convened by World Vision, however provincial coordination has not been possible due to understaffing and lack of funds.

Education

Following the displacement of an entire island population due to the eruption of Kadovar volcano, UNICEF released prepositioned supplies for temporary learning spaces, which were used for elementary and early childhood education by partner Save the Children.

Over 100 teachers and school directors have been trained on establishing and running safe temporary learning spaces (STLS). Supply distribution in Southern Highlands and Hela Provinces included school-in-a box, early education kits, recreation kits, tarpaulins and tents. A second round of supply distribution will take place in late August, following the completion of training in four batches of teachers from areas which were the worst affected by earthquakes, but which have been difficult to access due to conflict.

As fur, 8,764 children have been enrolled in STLS for non-formal education, including early learning. Many of the 3-14 year old children have never been to schools or ECD centres or have attended only rarely. These children participate in discussions on disaster risk reduction and safety measures. The most recent efforts in July and August have been to complete the water and sanitation repairs at schools, to train four additional sets of teachers from 67 schools in Southern Highlands and Hela Provinces, and to transport a second round of supplies up to Southern Highlands and Hela. These 67 schools will be assisted for the next seven months through the Education Cannot Wait funding.

The Education cluster under the leadership of Department of Education continues to meet regularly, however, participation remains limited to four organizations and the Department of Education (UNICEF, Save the Children, World Vision and ADRA). In the earthquake affected Provinces, the Provincial Departments of Education undertake the coordination, but have low capacity to do this.

Child Protection

During the reporting period, the Child Protection programme reached more than 5,000 children with psychosocial support activities through 26 Child Friendly Spaces (CFS) or STLS in Southern Highlands and Hela Provinces. Around 11,000 children and caregivers have participated in events organised by Mobile Child Protection Teams, including "Ending Violence against Children campaign" with messages through drama, songs and speeches from religious leaders, teachers and children. Five of the CFS are linked to Learning Empowerment and Protection centres, which is a joint UN WOMEN-UNFPA-UNICEF response to the crisis to ensure women and children who are most vulnerable and disproportionately impacted due to the earthquake have access to the support and protection, especially from gender-based violence.

UNICEF and partners have conducted training of teachers, school directors, police, village magistrates, social workers or child protection officers on recognising and responding to children's psychosocial stress, distress and abuse. This training was linked to UNICEF's Code of Conduct and also to the provision in the National Children's Act. Tents, tarpaulins and kits were delivered as well as most of the supplies for restoring and improving damaged latrines.

Media and External Communication

Since March 2018, a wide range of communication materials highlighting the impact of the Highlands earthquakes on children were developed and shared with local and international media, UNICEF National Committees, UNICEF internal website and social media channels. These included media releases, news notes and human interest stories, plus radio and television interviews. These were also featured on UNICEF's website and medium site. UNICEF staff provided more

than 10 radio and television interviews for local and international media. Over 100 social media posts were developed and posted on Facebook, Twitter and Instagram to highlight issues facing children in earthquake affected communities and UNICEF's support to the earthquake emergency. Most of these posts were shared and retweeted by the Regional Office, Headquarters and UNICEF National Committees in Australia, New Zealand and UK.

Communications with Communities, Community Engagement & Accountability

The "communicating with communities" work has included social mobilisation of parents to support the child-friendly spaces; information and awareness raising on ending open defecation and practicing good hygiene; promotion of good practices on infant and young child feeding and vaccinations; and community campaigns on ending violence against children and women. In addition to these, informational messages and public service announcements were developed and translated into *Tok-Pisin* and shared with partners to support their communication. Key messages on health, nutrition, education, child protection and water, sanitation and hygiene were developed and broadcasted over 400 times on the National Broadcasting Commission while Radio Maria, a church run radio station, hosted live discussion sessions with UNICEF and Government partners on the earthquake response.

Considerable time and effort has been spent on communicating and engaging with community leaders throughout Southern Highlands and Hela Provinces; this led to local assurance for secure access to areas to carry out humanitarian activities. This has reduced the need for security escorts to many areas. Local leaders have also enthusiastically mobilised communities for project activities- most notably for the integrated child and health campaigns.

Supply and Logistics

Since January 2018, UNICEF has handled 118.79 metric tons or 481.65 cubic meters of emergency supplies for direct delivery, delivery through partners or as government-controlled supplies. The total value of procurement for emergency supplies and related services is US\$ 822,000. This includes supplies and related services for responses in child protection, education, health, nutrition and WASH for the earthquake response as well as health supplies for the polio emergency response. In addition, early in the year, pre-positioned education supplies procured in a previous year were handed over to an implementing partner for the Kadovar volcano disaster response. The bulk of emergency supplies have reached health centres, schools or end users, but there are still some education supplies to be distributed, and additional procurement is underway for the polio emergency response since it has been expanded from three to nine provinces for second round and nationwide for e the third and fourth rounds..

Additional funding is required in order to meet the remainder of assessed needs for emergency supplies, especially for WASH, education and nutrition.

Security

PNG Defence Forces, first deployed after the February earthquake, remain in place in Hela and Southern Highlands Provinces. Local armed groups have a history of damaging roads, pipelines and other infrastructure in Hela Province. More troops were deployed after a nine-month long State of Emergency was declared on 18 June for the Southern Highlands Province (544 km northwest of Port Moresby) due to destruction of public property and looting after a disputed national court decision on the result of an election for Governor. Local armed groups have repeatedly clashed with each other. In August 2018, after a spate of deaths and confrontation, these groups were involved in conflict resolution and peace negotiations. Thanks to extensive consultations with government, religious and traditional leaders, most areas of Southern Highlands and large areas of Hela Province have proved to be safe and peaceful for humanitarian operations, with risk mitigation measures in place, including Defence Force or other escorts in some places.

Funding

UNICEF's East Asia and Pacific Humanitarian Action for Children appeal to include the UNICEF PNG earthquake response funding requirement of US\$13.7 million. UNICEF PNG has raised a total of US\$3.65 million in emergency funding. In addition to this funding, and in an effort to ensure a timely response and scale up of UNICEF's humanitarian assistance,

UNICEF advanced a loan of US\$1.5 million to the Country Office using the internal UNICEF Emergency Programme Fund (EPF) mechanism. Funding was also made available from global and regional thematic funds. From the development side, Education Cannot Wait contributed US\$1.5 million to support UNICEF's education work as part of the response. Continued and timely donor support will be critical to deliver planned humanitarian response.

Mid-point reviews of expenditures and funding demonstrated very high operational costs due to several delays caused by conflict situations; higher than expected travel, logistics and security costs to reach remotely situated children and requirements for external expertise. Funding requirements by sector have been revised compared to the initial response, to reflect some sectors accessing and using different types of funds that are not included as emergency funding. There is an overall small reduction in the total requirement for 2018.

| Papua New Guinea | Initial 2018 Requirement (US\$) | Revised 2018 Requirement (US\$) | | Funding Gap | | |
|---------------------|------------------------------------|---------------------------------|------------------------|-------------|----|--|
| | | | Funds Available (US\$) | US\$ | % | |
| Nutrition | 2,197,958 | 3,000,000 | 1,546,123 | 1,453,877 | 48 | |
| Health | 2,043,256 | 3,000,000 | 820,178 | 2,179,822 | 73 | |
| WASH | 3,496,000 | 3,200,000 | 720,314 | 2,479,686 | 77 | |
| Child Protection | 2,530,000 | 2,000,000 | 377,978 | 1,622,022 | 81 | |
| Education | 3,523,360 | 2,500,000 | 182,535 | 2,317,465 | 93 | |
| Total | 13,790,574 | 13,700,000 | 3,647,128 | 10,052,872 | 73 | |

^{*} Education Cannot Wait funding in the amount of US\$1.5; Multi-Donor Trust Fund money for child protection, some global thematic funds and some National Committee funds are being used, with permission from donors for emergency response, but are not included in this table as emergency funding.

Next Situation Report: 30/10/2018

UNICEF PNG: https://www.unicef.org/png/

UNICEF PNG Facebook: www.facebook.com/unicefpng

Who to contact for further information:

David McLoughlin Representative UNICEF Papua New Guinea dmcloughlin@unicef.org +675 7100 0370 Judith Bruno
Deputy Representative and
UNICEF Papua New Guinea
<u>ibruno@unicef.org</u>
+675 71069437

Noreen Chambers Communications Specialist UNICEF Papua New Guinea nchambers@unicef.org +675 71155295

SUMMARY OF PROGRAMME RESULTS 2018

| | Overall needs | UNICEF and IPs | | | Cluster Response | | |
|---|------------------|----------------|------------------|--------------------------------|------------------|------------------|--------------------------------|
| | | 2018 Target | Total Results | Change since last report | 2018 Target | Total Results | Change since last report |
| NUTRITION | | | | | | | |
| Children < 5 years old with acute malnutrition admitted into therapeutic feeding programme | 2,480 | 850 | 650 | 608 | 850 | 650 | 608 |
| Children 6 to 59 months old receiving micronutrient powder | 59,520 | 32,000 | 23,581 | 19,075 | 32,000 | 23,581 | 19,075 |
| Children 6-59 months receiving Vitamin A | 53,312 | 47,617 | 22,305 | 12,987 | 47,617 | 22,305 | 12,987 |
| Children 12-59 months receiving deworming tablets | 53,312 | 32,000 | 22,396 | 13,078 | 32,000 | 22,396 | 13,078 |
| Pregnant and lactating women counselled on infant and young child feeding | 87,000 | 30,000 | 31,251 | 6,798 | Not available | Not available | Not available |
| HEALTH | | | | | | | |
| Children (o-59 months) who received pentavalent vaccination (any dose)* | 79,400 | 15,000 | 11,710 | 1,759 | 79,400 | 16,496 | 1,759 |
| Number of children (o-59 months) who received measles and rubella vaccination* | 79,400 | 40,000 | 37,942 | 17,199 | 79,400 | 38,316 | 17,199 |
| Number of women (15-49 years) who received TT vaccines | 125,120 | 30,000 | 28,855 | 21,450 | | | |
| Children under age 5 vaccinated against polio | 3,520,450 | 3,520,450 | 306,000 | 306,000 | 3,520,450 | 306,000 | 306,000 |
| WATER, SANITATION & HYGIENE | | | | | | | |
| Number of people who have access to safe drinking water | 312,000 | 75,000 | 64,017 | 33,366 | 270,000 | Not available | Not available |
| Number of girls and boys who have access to repaired and improved latrines | 312,000 | 15,000 | 11,413 | 7,757 | 270,000 | Not available | Not available |
| Number of people who received information on good hygiene practices | 312,000 | 70,000 | 56,813 | 44,291 | 270,000 | 61,291 | 44,291 |
| CHILD PROTECTION | | | | | | | |
| Number of children and adults reached with violence prevention messages | 143,446 | 16,000 | 11,089 | 290 | 33,400 | Not available | Not available |
| Number of children reached with psychosocial support services | 125,000 | 15,000 | 5,501 | 2,128 | 15,000 | 5,501 | 2,128 |
| EDUCATION | | | | | | | |
| Number of children (3-14 yrs) enrolled in STLS for non-formal education, including early learning | 23,000 | 10,000 | 8,674 | 4,760 | 10,000 | 8,674 | 4,760 |
| Number of teachers reached with teaching kits and training support | 5,000 | 300 | 306 | 60 | 5,000 | Not available | Not available |

[•] In previous Situation Reports, pentavalent (any dose) and MR were reported in one combined indicator. They have been separated now due to significant divergence in needs and in children receiving the different vaccines.