Joint Initiative on Maternal, Newborn and Child Health (JI-MNCH)

Annual Report 2011

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Acknowledgements and Disclaimer

We would like to thank Australia, Norway and the United Kingdom for their kind contributions to improving maternal, newborn and child health among some of the poorest and hardest-to-reach communities in Myanmar's Ayeyarwady Delta. Their support to the Joint Initiative on Maternal, Newborn and Child Health is gratefully acknowledged.

This document has been produced with the financial assistance of Australia, Norway and the United Kingdom. The views expressed herein should in no way be taken to reflect the official opinion of the donor governments.

Cover photograph: A young boy is held by his mother. He was suffering from pneumonia and was referred to hospital with support from the JI-MNCH programme.

Acronyms

AMW Auxiliary Midwife

BHS Basic Health Staff

CHW Community Health Worker

DOH Department of Health

EPI Expanded Programme of Immunization

EmOC Emergency Obstetric Care

ECC Emergency Child Care

H2R Hard-to-reach

INGO International Non-Governmental Organization

IOM International Organization for Migration

IP Implementing Partner

JI-MNCH Joint Initiative on Maternal, Newborn and Child Health

MOH Ministry of Health

MUAC Mid-upper Arm Circumference

NGO Non-Governmental Organisation

RHC Rural Health Centre

RI Relief International

SRHC Sub-rural Health Centre

TBA Traditional Birth Attendant

VHC Village Health Committee

VTHC Village Tract Health Committee

Contents

1 Executive Summary

In 2011 the Joint Initiative on Maternal, Newborn and Child Health succeeded in its goal to deliver health care services to poor and hard-to-reach populations in targeted areas of the Ayeyarwady Delta. It built on the achievements and lessons learned in 2010 and expanded the programme into three new townships, whilst also broadening implementation to include all six activities outlined in the Description of Action.

Working in collaboration with township health authorities and other health partners, a total of 9,727 births (54%) were attended by skilled personnel in 2011 and 2,624 births (15%) by Auxiliary Midwives across project areas. In the three project townships, 40 per cent of villages are now covered by Auxiliary Midwives and 68 per cent by Community Health Workers. A total of 21,565 under-one children were vaccinated against diptheria, pertussis and tetanus, and 20,989 against measles. Achievement rates were 94 per cent and 91 per cent respectively. A total of 23,941 pregnant women were vaccinated against tetanus toxoid and 21,827 received antenatal care, achievement rates of 96 per cent and 87 per cent.

From the start of the programme in May 2010 until December 2012, almost US$12 million has been made in grants to five Implementing Partners at six project sites: Merlin, IOM, Save the Children, Relief International and Medicins du Monde. Contracts were extended until December 2012 with Merlin and IOM in August, and in November with Save the Children .

The start of programme implementation by Relief International in Dedaye met with no major issues since activities began in June. For extension of the programme into two new townships, contracts were signed in late November with Medecins du Monde and IOM to begin implementation in Pyapon and Mawlamyinegyun townships. Planning for these townships benefited considerably from the lessons learned in year one, which informed the new Joint Township Health Plans and Phase 2 work plans that were developed following joint assessments in the townships in September.

Achievement of training targets for health workers was above 80 per cent in 2011. A total of 162 new Auxiliary Midwives and 325 new Community Health Workers were trained. In addition, 255 Auxiliary Midwives and 732 Community Health Workers received refresher training and 845 Traditional Birth Attendants were briefed in ‘Dos and Don’ts’.

Supporting voluntary health workers is critical to limiting attrition rates. The coordination mechanism continued to work effectively with 352 meetings held at Rural Health Centres across project areas. Some Implementing Partners changed the frequency of meetings for Voluntary Health Workers to a quarterly or alternate month system. This reduced the travel burden on voluntary health workers and budget expenditure but also had consequences on reporting and levels of Continous Medical Education. Regular meetings were held at the township level between health authorities and Implementing Partners to improve programme planning and coordination. Other health partners are involved increasingly in coordination with the JI-MNCH programme, providing technical assistance and sharing experiences.

Monitoring and supervision of Rural Health Centres by township health staff and Implementing Partners was successful in most project areas. In Dedaye, the number of visits was slightly higher than planned. In Labutta and Bogale, achievement was 74 per cent and 69 per cent respectively, but in Middle Island only 33 per cent of visits were undertaken. This was explained by the workload of the Laputta township health team and travel difficulties. Rural Health Centres are succeeding in their goal to provide quality medical care, with noted improvements in EPI coverage and antenatal care.

On 4th July, Vice President Dr Sai Mauk Kham visited Bogale where he observed training of Community Health Workers. The Vice President expressed his satisfaction with the training.

Essential drug kits were distributed although achievement of targets was uneven. Drug procurement remained a problem in the second half of 2011 and is undergoing a review to reduce lead times. Monitoring

of drug distribution was improved and some Implemetning Partners are planning to review the contents of drug kits.

In 2011, health workers conducted 8,662 routine outrach visits and 1,663 visits to hard-to-reach areas. Outreach visits to project areas established at the start of the programme in May 2010 exceeded targets whereas newer project areas had lower achievement. The planned number of outreach visits is expected to decline in future quarters following a review of the Department of Health EPI guidelines on the definition of outreach and hard-to-reach.

The emergency referral system became operational across all project areas in 2011 and functioned in excess of targets. In the first six months, a total of 1,108 cases were referred to township hospitals and by the end of the year 3,113 cases were referred. The survival rate for emergency referrals was 99.7 per cent.

Some Implementing Partners referred considerably more cases than planned. This may have consequences on the budget for referrals in 2012. A review of the system will be undertaken to clarify the limitations of support and ensure that vulnerable populations, particularly in hard-to-reach areas, are being targeted effectively.

Building on the emergency referral system, maternal and child death follow-up is now taking place across all project areas. Follow-up information is discussed at regular field level meetings to improve service delivery. A review of the follow-up system is on going because greater support is required by assistant surgeons/medical officers to ensure reporting accuracy.

The programme recognises the value of a demand side approach to health interventions and has focused on supporting Village Health Committees and establishing revolving funds for emergency referrals. In Bogale and Middle Island, over 97 per cent of villages have health committees, while in Dedaye, revitalisation of health committees began in the fourth quarter.

Progress was made on nutrition following a review process that began in April. A nutrition component was worked into Phase 2 and the Joint Township Health Plans for new townships. Additional support was provided by the National Nutrition Center. IOM screened 3,243 children in the first half of 2011 and a further 2,439 in the second half. It has established 19 Village Food Banks and established community based Mother Support Groups.

The effort to document lessons learned from the implementation of the JI-MNCH programme progressed in the second half of the year. A framework for the lessons learned exercise was developed in December and areas covered will include the overall impact, the impact on hard-to-reach populations, the indirect impact, and the cost effectiveness and value for money of the programme.

The lessons learned report will provide valuable feedback on programme implementation. In the mean time, work will continue to deliver better planning and services in a variety of areas. Health care services are being provided to all villages in project townships, including those in hard-to-reach areas, however, greater efforts are needed to identify how successfully hard-to-reach populations are being targeted and what benefits they are receiving. To fulfil this goal, workshops will take place in 2012 at regional and township levels. Further work must also be carried out in the areas of psychosocial health, disaster risk reduction and nutrition.

2011 was an important test for the JI-MNCH programme. The achievements made in 2010 were replicated, suggesting that delivery systems and coordination are robust. Crucially, many of the lessons learned in the early part of implementation were incorporated into Phase 2 work plans and the expansion of activities into other townships. The year ahead can be expected to be similarly challenging as existing systems are refined and programme activities expanded.

2 Introduction

Background

The Joint Initiative on Maternal, Newborn and Child Health (JI-MNCH) is a collaborative programme that aims to increase access to maternal and child health services among poor and hard-to-reach populations in areas affected by Cyclone Nargis.

JI-MNCH builds on the successful post-Nargis coordination between the former Health Cluster, which was established as part of the Post-Nargis Recovery and Preparedness Plan in 2008, and the Government of Myanmar's Ministry of Health (MOH). In addition to resources from MOH, UN and NGOs, the programme draws on a US$12 million fund over a three-year period until 2012. This fund is supported by the governments of Australia, Norway and the United Kingdom and is administered by UNOPS through a Fund Management Office.

The programme began in May 2010 and by the end of the year implementation had started in three project areas in the Labutta and Bogale townships of Ayeyarwady Division. The Implementing Partners (IPs) are Merlin (Labutta Township, excluding Middle Island), IOM (Bogale Township) and Save the Children (Middle Island). On 16th June 2011, Relief International joined the programme as the fourth IP and began project activities in Dedaye Township following the establishment of a field office.

Relief International programme implementation commenced with the recruitment and training of a core Yangon-based team, which included technical sector experts, and a field team consisting of programme and administrative staff. Staff were trained in programme implementation, team-building, finance, logistics, and office management.

In partnership, Relief International and the Dedaye Township Health Department reassessed the original JI-MNCH work plan and revised it based on the needs of the township health system. A new Station Health Unit was established and training plans and the provision of supplies outlined in the original work plan were revised as necessary. Relief International also adjusted the work plan budget within the limits of what was approved already within the township level implementation budget.

Governance Update

When the Fund Management Office was established the positions of Fund Management Executive, Monitoring and Evaluation Officer and Operations Associate were filled by interim staff. The first two positions were filled in January and the latter position was awarded in July. A Project Support Specialist was also employed.

3 Implementation Status

3.1 Outreach and Hard-to-reach Activities

Outreach and hard-to-reach visits by Basic Health Staff (BHS) focus on the provision of antenatal and postnatal care, delivery of children by skilled birth attendants, Expanded Programme of Immunization (EPI) coverage, health education, reproductive health and the prevention of mother to child HIV transmission. Children are screened for malnutrition and minor illnesses are treated with essential drugs. More serious cases are referred for hospital treatment. Outreach visits are also an opportunity to complete birth registrations, maintain relations with Voluntary Health Workers and Village Health Committees (VHCs) and provide additional health services for turberculosis and leprosy cases.

In September, Merlin began work in the Myaung Mya area of Labutta, which is a new part of the township to be covered by the programme. The area has an estimated population of 10,000 people spread across 91 villages and served by 12 health facilities. Initial work succeeded in strengthening links between villages and the health system. Staff at health centres now attend township coordination meetings and Voluntary Health Workers attend monthly meetings arranged by Merlin. A number of existing Auxiliary Midwives were given refresher training, which allowed activities in the area to start quickly. Several candidates were identified for basic training in 2012.

Table (1) Routine and hard-to-reach outreach visits in 2011

	Labutta (Merlin)			Middle Island (Save the Children)			Bogale (IOM)			Dedaye (RI)			All project areas		
Activity	Target	Actual	Achieved	Target	Actual	Achieved	Target	Actual	Achieved	Target	Actual	Achieved	Target	Actual	Achieved
Routine Outreach (EPI Plus)	3696	4318	117%	1200	716	60%	2116	3240	153%	600	388	65%	7612	8662	114%
Hard-to-reach Outreach	762	877	115%	240	62	26%	526	648	123%	120	76	63%	1647	1663	101%

In the reporting period, 4,318 routine visits (117% of target) and 877 hard-to-reach visits (115% of target) took place in Labutta. Midwives and Basic Health Staff planned 2,116 routine outreach visits and 526 hard-to-reach visits in Bogale in 2011 and carried out 3,240 (153% of target) and 648 (123% of target) visits, respectively. In Middle Island, 1,200 routine outreach visits and 240 hard-to-reach visits were planned in 2011. A total of 716 routine outreach visits (60% of target) and 62 hard-to-reach visits (26% of target) took place.

The achievement of hard-to-reach visits in Middle Island appears low but this reflects not on the quality of service delivery, which was satisfactory, but on inaccurate planning. Save the Children will modify hard-to-reach targets in future. In Dedaye, 600 outreach and 120 hard-to-reach visits were planned in 2011 and a total of 388 outreach visits (65% of target) and 76 hard-to-reach visits (63% of target) were made.

Outreach and hard-to-reach visits succeeded in raising levels of antenatal care to 87 per cent across project areas. Coverage exceeded targets in all project areas except Middle Island where there were many midwife vacancies in 2011. Although coverage expanded, there is still progress to be made in improving the quality of antenatal care.

Table (2) Antenatal care coverage in 2011

Labutta (Merlin)		Middle Island (Save the Children)		Bogale (IOM)		Dedaye (RI)		All project areas	
Target	**Actual**	**Target**	**Actual**	**Target**	**Actual**	**Target**	**Actual**	**Target**	**Actual**
82%	**92%**	**82%**	**77%**	**87%**	**93%**	**85%**	**95%**	**84%**	**87%**

3.2 Training and Capacity Building for Basic Health Staff

At the regional level, the Ministry of Health provided training in Comprehensive Emergency Obstetric Care (EmOC) to doctors in Labutta, Bogale and Dedaye in Pathein. A further two days of multiplier trainings were later held at township hospitals. Also in Pathein, psychosocial health training was held over two days in October for township mental health teams from all project areas. These trainees shared information with other Basic Health Staff at monthly coordination meetings.

At the township level, a five-day training course in Basic Emergency Obstetric Care was conducted in Labutta by a Department of Health trainer from Nay Pyi Taw, assisted by a senior obstetrician.Participants were provided with standard operating procedures and a booklet to follow. Two batches of Basic EmoC training were conducted in Bogale in October, attended by 66 BHS, and in Dedaye between October-December, attended by 69 BHS.

A meeting of Basic Health Staff

Psychosocial health refresher trainings were held for BHS in Dedaye, in addition to a five-day course on Essential Newborn Care for hospital nurses, lady health visitors and midwifes, with further trainings planned in other townships. Stress management training was held in Bogale.

Continuing Medical Education was conducted at monthly meetings of BHS to improve capacity in areas such as use of the Health Management Information System, stress management, integrated immunization and the Early Warning and Reporting System.[1]

In Middle Island, courses on Management of Malnutrition and Exclusive Breast Feeding and Supplementary Feeding took place, in addition to a refresher course on the Health Management Information System.

3.3 Health Worker Training

Auxiliary Midwives and Community Health Workers are collectively known as Voluntary Health Workers (VHWs). They play an important role in providing health care coverage in areas beyond the reach of Basic Health Staff. Auxiliary Midwives must complete a six-month training programme, which involves three months of hospital-based learning and a further three months of practical field training at Rural Health Centres. Community Health Workers must complete a 30-day training course.

Township health department and Implementing Partners work together to provide VHW training with the aim of improving basic health knowledge and transferring the skills necessary for engaging in community health activities such as assisting emergency referrals and immunizations, providing health education and other primary health care activities. Department of Health guidelines were used for the selection and training of VHWs.

[1] Plese see Annex B

Table (3) Training of Voluntary Health Workers in 2011

	Labutta (Merlin)			Middle Island (Save the Children)			Bogale (IOM)			Dedaye (RI)			All project areas		
Activity	Target	Actual	Achieved	Target	Actual	Achieved	Target	Actual	Achieved	Target	Actual	Achieved	Target	Actual	Achieved
Training of new AMWs	25	25	100%	42	42	100%	96	75	78%	20	20	100%	183	162	89%
Training of new CHWs	25	25	100%	46	46	100%	269	187	70%	67	67	100%	407	325	80%
AMW refresher training	22	0	0%	55	42	76%	98	101	103%	144	112	78%	319	255	80%
CHW refresher training	559	455	81%	53	24	45%	155	175	113%	120	29	24%	887	683	77%
TBA refresher training	586	551	94%	100	110	110%	185	113	61%	180	71	39%	1051	845	80%

Auxiliary Midwives

The coastal geography of the project areas and reliance on slow, water-based transport serves to isolate many communities. Auxiliary Midwives (AMWs) play a vital role in such communities because they ensure quick access to obstetric care and emergency obstetric and child referrals. AMWs work independently in their villages but with support from Implementing Partners and Basic Health Staff.

In 2011, basic training was completed by 162 AMWs, including 25 in Labutta, two batches of 21 in Middle Island, 72 in Bogale and 20 in Dedaye. Across all project areas, achievement of targets was 100 per cent, except in Bogale where 78 per cent of the target was met. Upon completion of the training, each graduate was given a certificate, identity card and AMW kit.

In Middle Island, Village Health Committees encouraged pregnant women to deliver at health centres. This had a benefit on training because AMWs could assist a greater number of births. The 21 AMWs trained in the first batch witnessed and assisted an average of 30 deliveries and conducted three deliveries each. Training was also provided to 25 AMWs on exclusive breastfeeding and supplementary feeding.

Since the programme began, a total of 255 AMWs have participated in refresher training across the four project townships. This included 42 AMWs in Middle Island (76% of target), 101 AMWs in Bogale (103% of target), and 112 AMWs in Dedaye (78% of target). In Labutta, the training target of 22 AMWs was not met. There were 198 functioning AMWs in Bogale at the end of 2011 and village coverage by AMWs was 39 per cent (one AMW for every 2.6 villages).

Community Health Workers

A total of 325 new Community Health Workers (CHWs) were trained in 2011. This included 25 in Labutta, 46 in Middle Island, 187 in Bogale and 67 in Dedaye. Across project areas, target achievement was 100 per cent, except in Bogale where it was 70 per cent.

Since the programme start, the percentage of villages in Bogale covered by CHWs has risen from 40 per cent to 69 per cent and for AMWs from 23 per cent to 36 per cent. There were 374 functioning CHWs in Bogale at the end of 2011 with one CHW for every 1.4 villages.

Refresher training was provided to existing CHWs. In total, 455 CHWs attended courses in Labutta, 24 in Middle Island, 175 in Bogale and 29 in Dedaye. Target achievement was high in Labutta (81%) and Bogale (113%) but low in Middle Island (45%) and Dedaye (24%).

If CHWs are to conduct nutritional assessments they will need further training. The 28-day training they receive is not sufficient to develop their capacity to assess nutritional status by mid-upper arm circumference, weight and height.

In Laputta, the number of CHWs has declined since 2009 and coverage is now 87 per cent. After Cyclone Nargis a number of CHWs were trained by different NGOs working in the township so coverage was already high before the programme started. However, as parts of Nga Pu Taw Township, which had lower CHW coverage, have been transferred to Laputta Township, the amount of coverage has fallen.

Table (4) Comparison of Voluntary Health Worker coverage between 2009 and 2011

	Community Health Workers		Auliary Midwives	
Township	2009	2011	2009	2011
Laputta	105%	87%	33%	51%
Bogale	40%	69%	23%	36%
Dedaye	31%	36%	41%	34%

Traditional Birth Attendants

Reliance on Traditional Birth Attendants (TBAs) by pregnant women in rural areas can result in unsafe deliveries if correct and aseptic child delivery procedures are not used. TBAs were supported in their efforts to reduce the number of maternal deaths and identify potential complications early through briefing in 'Dos and Don'ts', which focused on safe delivery practices. They were also given clean delivery kits.

In total, 845 TBAs were briefed, which represents an achievement rate of 80 per cent. In Labutta, 551 TBAs were trained, in Middle Island, 110, in Bogale 113 and in Dedaye 71. Linkages between TBAs and Basic Health Staff were improved in the areas of antenatal care, referrals, use of clean delivery kits and immunization.

3.4 Drug Availability

Merlin supplies Voluntary Health Workers with drugs at monthly Rural Health Centre (RHC) meetings held in Labutta. VHWs that do not attend are followed and supplied by Merlin within a two-week period. Merlin teams also carry a full range of drugs and medical supplies with them to resupply villages that are visited on an *ad-hoc* basis. Drug usage is cross-checked with morbidity reports to help Implementing Partners check that drug prescriptions match the diagnoses made by VHWs.

Save the Children's international procurement of medicines was delayed due to weaknesses in administrative procedure. Drugs arrived in three batches between August and September and distribution began in December.

The long drug procurement process resulted in delays to the provision of essential medicines and kits to Basic Health Staff and VHWs in all project areas. Discussion is on going between UNOPS, Implementing Partners and procurement specialists concerning how to reduce lead times. Some Implementing Partners are planning to review their drug kits to assess which drugs are most essential.

Sub-Rural Health Centre (SRHC) drug kits are provided twice yearly but midwife vacancies and the establishment of new SRHCs and the shift of some villages (and SRHCs) from one township to another resulted in the uneven achievement of targets across project areas. The selection and training of new VHWs and refresher courses for existing VHWs took time to organise and were carried out in batches. Drug kits were provided to VHWs upon completion of training.

Table (5) Provision of drug kits for hospitals, health centres and VHWs in 2011

	Labutta (Merlin)			Middle Island (Save the Children)			Bogale (IOM)			Dedaye (RI)		
Type of drug kit	Target	Actual	Achieved	Target	Actual	Achieved	Target	Actual	Achieved	Target	Actual	Achieved
RHC kit	11	11	100%	8	4	50%	18	18	100%	16	0	0%
SRHC kit	52	50	96%	40	14	35%	35	45	128%	18	0	0%
CHW kit (existing and new)	526	524	100%	99	4	4%	222	395	178%	128	0	0%
AMW kit (existing and new)	182	204	112%	99	69	70%	107	167	156%	184	184	100%
Emergency health care drugs / Drug Kit (UNICEF Kit) for Station Hospital	6	6	100%	Not included in the Save the Children work plan			6	5	78%	6	0	0%

3.4 Coordination Meetings

Township and Rural Health Centre meetings

Coordination meetings were crucial to the planning of township wide health activities. Township health authorities and Implementing Partners began regular township coordination meetings in Labutta and Bogale in July 2010, in Middle Island in December 2010 and in Dedaye from July 2011. The meetings improved coordination among stakeholders and IPs at all levels from village to township. JI-MNCH coordination committee members, representatives from township authorities, medical superintendents, UN agencies and NGOs/INGOs attended the meetings.

In Bogale, it was found that World Vision's participation and experience sharing allowed the medical superintendent, IOM and Basic Health Staff to better understand the Health Grant Management strategy, and now IOM is partnering with them to implement a similar strategy through Village Tract Health Committees.

In Dedaye, five township coordination meetings out of a planned target of six were conducted in 2011. These were attended by approximately 75 participants, including BHS, Relief International staff and representatives from INGOs. Information on health activities in Dedaye and Pyapon townships was shared by MSI on reproductive health, AFXB on HIV/AIDS activities, and MRCS on disaster risk reduction. The meetings improved programme planning and implementation in the areas of EPI monitoring, RHC and SRHC supervision, emergency referrals, VHW selection and training, planning of activities and feedback on previous activities.

A total of 352 monthly RHC meetings were held across project areas. In Bogale, the participation of CHWs and AMWs in meetings was alternated monthly. In Dedaye, meetings were held quarterly. The frequency of meetings was reduced in Bogale and Dedaye townships to improve the quality of participation by creating smaller, more focused meetings. This resulted in significant cost savings – reflected in the second year budget – because food and travel costs were reduced. However, these changes limited the frequency of contact and filing of reports. There were further consequences on the regularity of drug replenishment and the provision of Continuous Medical Education by IPs.

The RHC meetings were seen as a useful forum for sharing experiences and identifying challenges. The participation of community support groups, members of the fire brigade, local officials and village elders made problem-solving more effective. Health education sessions were conducted on topics determined by

local needs. These included diarrhoea and its management, dengue fever, pneumonia, good nutrition, exclusive breast-feeding, birth plans, antenatal/postnatal care and maternal and child death reviews. The RHC meetings improved the capacity of village leaders to organise and conduct their Village Health Committees.

Table (6) Average attendance of VHWs at monthly RHC meetings in Labutta and Bogale

Voluntary Health Workers	Labutta	Bogale
Auxiliary Midwives	73%	62%
Community Health Workers	67%	40%

The average attendance rates for AMWs and CHWs in 2011 were 73 per cent and 67 per cent respectively at RHCs in Labutta. In Bogale, attendance rates were 62 per cent for AMWs and 40 per cent for CHWs.

In Middle Island, approximately 90 per cent of VHWs attended coordination meetings at Sub-rural Health Centres, which resulted in an increase in the number of referrals and Continuous Medical Education sessions than planned. Attendance rates are subject to seasonal variation based on harvests but further evaluation is required to explain why rates in some areas are low. Although attendance was higher than in other townships where meetings are held at the RHC level, the quality of such meetings is more difficult to verify. In analysing rates of attendance, it is important to consider if participants are from hard-to-reach areas because this may affect their ability to attend meetings. However, reporting by VHWs improved over previous quarters and now stands at over 90 per cent.

Discussions at SRHC meetings covered technical support, the assignment of tasks and the arrangement of support to villages such as antenatal/postnatal visits, health education sessions, and preparation for referral of high-risk cases.

Action plans were developed to fulfil each area's needs. For instance, in some places the level of EPI coverage was reduced because there were no Voluntary Health Workers to inform and mobilise the community before the arrival of midwives. Similarly, the presence of migratory households in some villages affected planned immunization coverage. Other issues discussed included the availability and distribution of clean delivery kits, transportation difficulties, limited access to health services in outreach and hard-to-reach areas, and a lack of referral capacity in some villages with a high incidence of snakebites.

Extension into Dedaye Township

With the programme extension into Dedaye, Relief International organised a township advocacy meeting at the Dedaye Township General Hospital to discuss implementation on 3rd August, 2011. There were 65 participants including the Pyapon District senior medical superintendent, township medical officer, the township administrative officer, regional parliament members, and representatives from UN agencies, INGOs, and other local implementing partners. Health staff from RHCs and SRHCs also attended.

The township administrator welcomed the start of activities in Dedaye and highlighted the health needs, emphasising the importance of coordination between all stakeholders. The township's parliament representative discussed the value of health education.

Coordination among health partners

Other partners, notably the Myanmar Red Cross Society, are implementing programme activities such as disaster risk reduction planning and first aid training.

The JI-MNCH programme must complement the Global Alliance for Vaccine Initiative and Health Systems Strengthening programme and 3MDG fund, which provide essential health services to hard-to-reach

populations. Sharing information and practices among health partners is critical to planning and coordination. As an example of good practice, IOM consulted with World Vision to finalise the Emergency Health Grant guidelines in the fourth quarter of 2011. In January 2012, IOM and World Vision will conduct training on Emergency Health Grant management to ensure that Village Tract Health Committees can manage revolving funds for referrals sustainably and accountably.

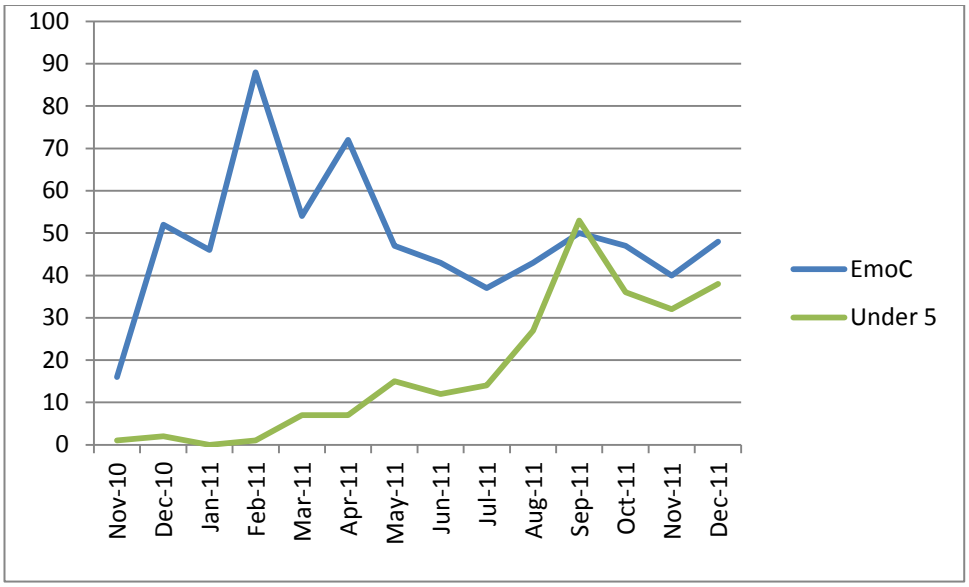
3.5 Emergency Referrals

The common causes of Emergency Obstetric Case referral across all project areas were obstructed and prolonged labour, preeclampsia/eclampsia, haemorrhage, scarring from births by caesarean section, abortion and pre-term delivery. Emergency Child Care referrals were caused by acute viral infection, acute respiratory infection, severe pneumonia and gastroenteritis.

In 2011, a total of 1,010 emergency cases (102% of target) were referred and supported by Merlin in Labutta. Of these, 615 were EmOC, 242 ECC and 153 other emergencies.

The Labutta Township population is approximately 320,000. Within this population, a total of 8,000 pregnancies can be expected annually, based on a pregnancy rate of 2.5 per cent. The World Health Organization estimates that 15 per cent of pregnancies will have a complication, which in Labutta Township would result in about 1,200 cases annually. Based on these assumptions, the 615 emergency obstetric cases referred in 2011 represent 50 per cent of potential obstetric emergencies.[2] This shows that the referral system is a good proxy indicator of the coverage of the project.

Figure (1) Emergency referral cases in Labutta (November 2010 to December 2011)

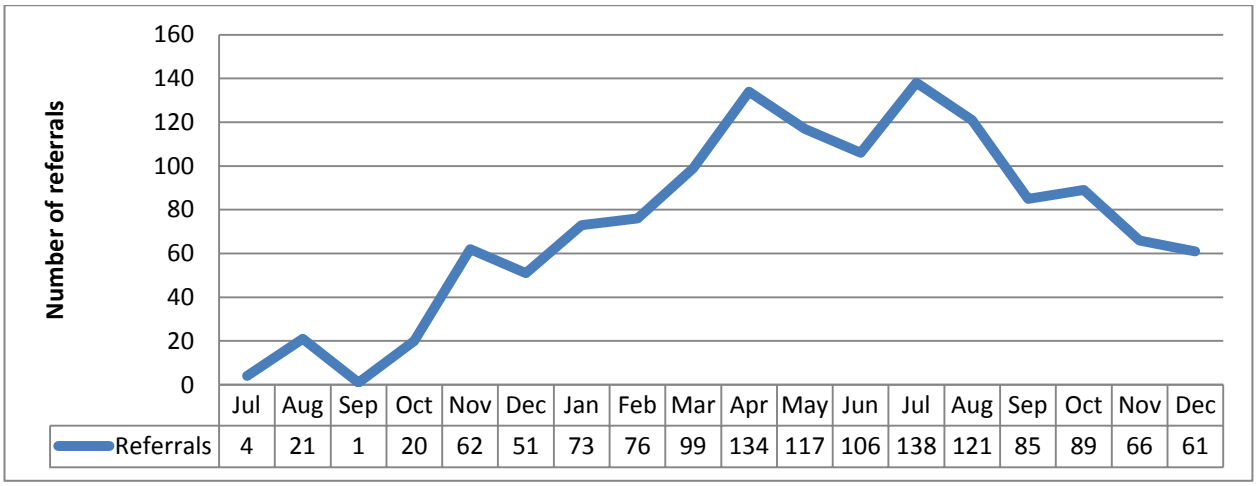


A total of 1,165 emergency cases (199% of target) were referred in Bogale, of which 1,071 were classified as EmOC or ECC. There was a decrease in the number of ECC referrals in October and November, which may be a seasonal trend explained by a drop of approximately 30 per cent in the incidence of pneumonia over previous quarters. Although absolute numbers of ECC referrals started to fall in September, by December they were on the rise again, with a monthly average in the fourth quarter of 35.3 cases. In October and November the rice crop was harvested and this may have accounted for the fall in EmOC cases. Further investigation is needed and will be helped by the possibility of identifying trends based on data from previous years.

[2] http://www.who.int/features/qa/12/en/index.html

IOM also conducted joint awareness campaigns with BHS staff, addressing the referral service, identification of danger signs and the importance of antenatal/postnatal care services in RHC meetings.

Figure (2) Emergency referrals in Bogale (July 2010 to December 2011)



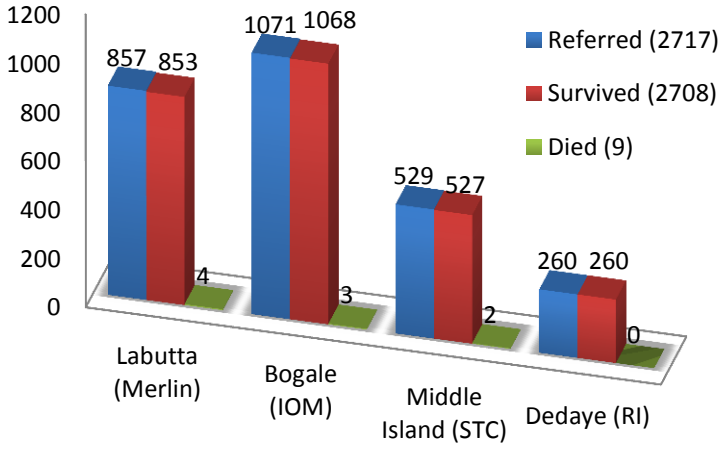
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Referrals	4	21	1	20	62	51	73	76	99	134	117	106	138	121	85	89	66	61

In Middle Island, 313 EmOC and 216 ECC cases were referred to the Station Hospital in 2011, totalling 529 cases (196% of target). All referral cases survived except one child suffering from multiple-organ failure resulting from pneumonia and severe protein-energy malnutrition and one maternal death in the hospital.

Referred cases received support for transportation, hospitalisation and meals. To cover transportation costs the programme has provided villages with Emergency Referral Funds.

In Dedaye, 409 emergency referrals (102% of target) were made, of which 181 were EmOC and 79 ECC. No deaths were reported for EmOC and ECC referrals. For other emergencies the survival rate was 96 per cent.

Figure (3) Referral outcomes among IPs for EmOC and ECC referrals in 2011



Survival Rate: 99.7%

Table (7) Emergency referrals across project areas in 2011

	Referrals (Jan June)				Referrals (July-Dec)				Total referrals (2011)			
Township	EMOC	ECC	Other	Total	EMOC	ECC	Other	Total	EMOC	ECC	Other	Total
Labutta (Merlin)	350	42	90	482	265	200	63	528	615	242	153	1010
Middle Island (Save the Children)	10	11	0	21	206	302	0	508	216	313	0	529
Bogale (IOM)	405	143	57	605	401	122	37	560	806	265	94	1165
Dedaye (RI)	Project started in June 2011				181	79	149	409	181	79	149	409
All project areas	765	196	147	1108	1053	703	249	2005	1818	899	396	3113

Across project areas, 58 per cent of emergency referrals were classified as EmOC. In contrast to Merlin, IOM and Relief International, which refer all emergencies, Save the Children only refer EmOC and ECC cases. Of the total referrals, 13 per cent were classified outside of EmOC and ECC. In Dedaye, this was 36 per cent, compared with just eight per cent in Bogale. Merlin stopped providing support for other emergency refferal cases in September 2011.

3.6 Joint Monitoring and Supervision

Joint supervision ensures that health needs are being met in project areas. Health centres are monitored, together with the work of Basic Health Staff and their coordination with Implementing Partners. The functionality of Village Health Committees and the accessibility of Voluntary Health Worker services are also considered. Feedback on supervision visits is provided at monthly coordination meetings between BHS and IPs where follow-up action is determined.

All IPs made joint monitoring visits to RHCs, accompanied by township health staff. In Labutta, Merlin conducted an additional five visits to hard-to-reach areas. Supervision teams checked the collection of data by BHS in the areas of antenatal care, birth and death registration and EPI micro plans. It was found that some BHS were not collecting data correctly and further training was provided to remedy this. Drug usage, the storage of equipment and the condition of health centre facilities were also checked.

Supervision teams used a Department of Health checklist to assess maternal, child and neonatal heath status, immunization coverage, the status of communicable diseases and other support needs at each RHC. The joint supervision and monitoring visits found that medical stocks were sufficient to meet the essential needs of RHCs; improvements had taken place in EPI coverage and antenatal care and that registers for EPI, antenatal, and outpatient departments now exist at all RHCs. In addition, coordination between BHS, VHCs and VHWs was effective. Improvements can still be made. Some BHS and VHWs do not fully understand the emergency referral criteria, and BHS need to ensure that birth certificates and other necessary forms are completed, in addition to providing regular data on the functioning status of VHWs.

Table (8) Joint supervision visits conducted in 2011

	Target	Supervision (Jan-June)	Supervision (July-Dec)	Actual	Achieved
Labutta (Merlin)	38	14	14	28	74%
Middle Island (Save The Children)	24	5	3	8	33%
Bogale (IOM)	29	6	14	20	69%
Dedaye (Relief International)	27	Project started in June 2011	28	28	104%
All project sites	118	25	59	84	71%

Approximately 70 per cent of planned visits were achieved in Labutta and Bogale. Dedaye achieved 100 per cent as there are two supervision teams and field visits are even made on Saturdays led by the medical superintendent. In Middle Island, Save the Children fulfilled only 33 per cent of planned supervision visits, which is explained in part by the workload of the township health team (Labutta Township has two projects) and long travel times. IPs should find ways of increasing joint supervision.

3.7 Support to Village Health Committees

Village Health Committees are an essential component of demand side interventions and a useful forum to bring village and village tract authorities closer to BHS, sensitising them to the benefits of functional VHCs. Some village tracts/villages established VHCs before the programme started. These, together with new VHCs, have been strengthened through capacity building.

VHCs improve the sustainability of community participation in township health promotion activities. They are expected to participate in and manage emergency referral fund-raising and coordinate at the community level with BHS in areas such as EmOC and other life threatening emergencies. VHCs are encouraged to participate in RHC coordination meetings and are required to hold regular meetings with midwives because they assist in the referral of emergency cases.

Merlin conducted management training over a two-day period for VHCs and Village Tract Health Committees (VTHCs) in Labutta. Of the 560 VHCs invited to attend the event, 458 sent participants, an attendance rate of 82 per cent. Voluntary Health Workers were instructed also in how to use a new Community Program Management Information System register and monthly reporting format. Field teams were trained in the use of a performance management tool to improve tracking of diagnoses and treatments.

To establish baseline information on the functional status of VHCs in IOM targeted districts, the following assessment criteria are used:

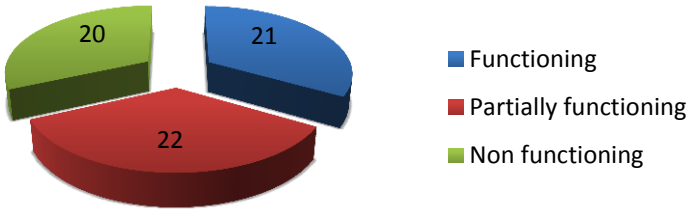
1. Regular Village Tract Health Committee meetings
2. Emergency referral system in place
3. Record keeping of all Village Tract Health Committee activities
4. Coordination with Basic Health Staff

For the whole year, 63 VTHCs were established to manage emergency health grants, which represents 86 per cent of village tracts in Bogale. These committees are supported and linked to VHCs, which cover 97 per cent of the township's villages. The number of villages with revolving funds increased from 262 in the first half of the year to 366 by the year's end.

Among the 63 VTHCs formed, 21 (33.3%) are functioning, 22 (35%) are partially functioning and 20 (32%) are non-functioning.

IOM established 61 new VHCs during the first half of the year. Bogale now has a total of 568 VHCs.

Figure (4) Functional status of Village Tract Health Committees in Bogale



All 78 villages in Middle Island have VHCs and are supported by Save the Children. To develop the capacity of VHCs, training of trainers was given to Save the Children staff between April and June. Multiplier trainings will be coupled with the establishment of revolving funds in the next quarter. VHC members held regular meetings with midwives and improved support at the village level led to an increase in the number of health education sessions conducted.

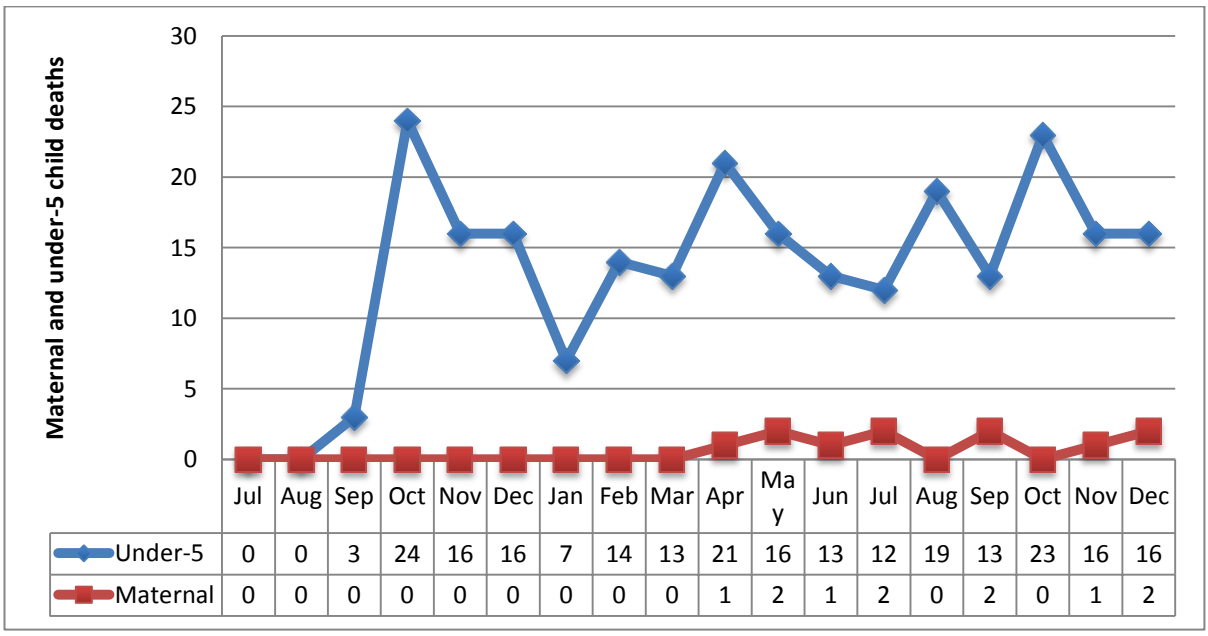
With the support of VHCs, Auxiliary Midwives received quality practical training experience in their assigned health posts in Middle Island, especially in Pyin Ka Yaing Station Hospital and Thet Kal Thaung RHC. Pregnant mothers from villages falling under the purview of the Station Hospital and RHC were supported to deliver at these health facilities.

In Dedaye, the revitalisation and formation of VHCs in 90 village tracts started in the fourth quarter and is on going. VHCs will be given training in leadership and financial management.

3.8 Maternal and Child Death Follow-up

Maternal and child death follow-up started in all project areas. In Bogale, Department of Health and IOM teams conducted follow-up on 23 under-5 deaths and ten maternal deaths out of a reported 194 deaths. More follow-up could not be achieved because of inadequate manpower. The 55 deaths recorded in the fourth quarter of 2011 mirror a similar trend in 2010. This trend requires further investigation because there were no reported disease outbreaks or other serious health issues. IOM will support efforts by DOH to improve follow-up on deaths.

Figure (5) Maternal and under-5 child deaths in Bogale (July 2010 to December 2011)



	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Under-5	0	0	3	24	16	16	7	14	13	21	16	13	12	19	13	23	16	16
Maternal	0	0	0	0	0	0	0	0	0	1	2	1	2	0	2	0	1	2

Eighteen under-5 child deaths were followed-up by Save the Children in Middle Island. Only one maternal death was reported in 2011.

In Dedaye, five maternal deaths were followed-up. However, joint supervision teams were unable to follow-up under-5 deaths in the fourth quarter because of the Township Medical Officer's tight schedule. Relief International has committed to the follow-up of such deaths in the next reporting quarter.

Maternal and child death follow-up was delayed in Labutta but Department of Health guidelines and a reporting format on maternal and child death follow-up were distributed to BHS in the fourth quarter. Two maternal deaths and 48 under-5 deaths, of which 18 were neonates, were followed-up.

Of child deaths, approximately 20 per cent were neonatal. To reduce the number of such deaths, training is planned for BHS and VHWs in 2012 on essential newborn care.

Table (9) Most common causes of maternal and under-5 child deaths

Maternal	Children under-5
Retained placenta with postpartum haemorrhage	Neonatal
Uterine rupture	Fever with with fits
Eclampsia	Severe pneumonia
Anaemic heart failure	Beriberi
Abortion	Acute diarrhoea
Antepartum haemorrhage	

3.9 Nutrition

Health workers screen children for malnutrition based on measurement of Mid Upper Arm Circumference (MUAC). Those children at risk of severe malnutrition (red on the MUAC screening) are recommended for emergency referral.

IOM deployed two Mobile Nutrition Teams (MNTs) to screen and monitor the nutritional status of under-5 children in villages. In 2011, MNTs screened 16,851 children. Of these, 1,419 (8.4%) were found to be "at risk" of malnutrition, 258 were moderately malnourished and 35 were severely malnourished. A total of 1.7 per cent of children were classified as Global Acute Malnourished and were referred to the Village Food Bank (VFB) and SRHC for therapeutic feeding management under the care of midwives. While teams conducted MUAC screening, mothers of "at risk" children were given health education and nutrition training.

Table (10) MUAC screening results in Bogale

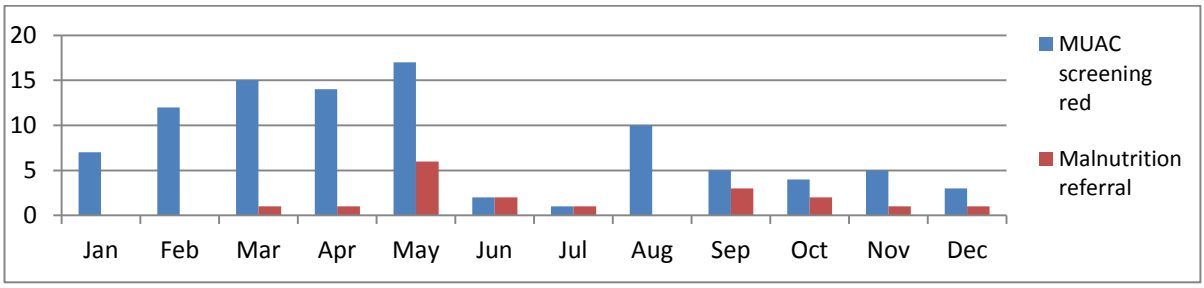
Nutrition Team MUAC Screening Results	Jan-Dec 2011
Total children MUAC screened	16,851
Children at risk	1,419
Moderate Malnourished	258
Severe Malnourished	35
Global Acute Malnourished	293

In Bogale, families and caregivers, pregnant women, lactating mothers and those with children under-5 were given health education on the benefits of exclusive breast feeding, nutritious care for children, the prevention of vitamin deficiencies and hygiene. With the support of BHS, MNTs conducted 90 health education sessions with 2,161 participants. Education materials were also given.

Table (11) Mid Upper Arm Circumference screening results by month in Laputta

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
MUAC screening red	7	12	15	14	17	2	1	10	5	4	5	3	95
Malnutrition referral	0	0	1	1	6	2	1	0	3	2	1	1	18

Figure (6) Comparison of children screened red on MUAC with emergency referrals in 2011



Merlin referred nine children. Referral rates remain low so Merlin field staff will make this a support priority over the coming months when conducting supervision activities.

Village Food Banks

During the reporting period, IOM established and supported 19 Village Food Banks to provide sustenance for undernourished children. Cooking demonstrations were conducted also in these villages with the support of the Myanmar Maternal and Child Welfare Association and BHS. Voluntary Health Workerss and VHCs received culinary training, the objective being to educate mothers and caregivers in the preparation of nutritious food for children, balancing the three main food groups (fat, protein and carbohydrates) while also providing direct support to severe and moderate malnourished children. MNTs regularly visited VFBs to provide support.

Table (12) Assessment of IOM Village Food Bank functionality (fourth quarter)

Benchmarks	Having revolving fund	Regular cooking activity and food supplies by VHC members if there is malnourished child.	Regular attendance of malnourished children	Improvement of MUAC of Malnourished children	Record Keeping
Number achieving a particular benchmark	13	19	10	9	10

Summary of Benchmarks:	
VFBs Functional (Achieving all Benchmarks)	11
VFBs Partially Functioning (*Achieving any two benchmarks*)	7
VFBs Non Functioning (Not achieving any benchmarks)	1
Total VFBs	19

Mother Support Groups

Mother Support Groups (MSGs) are community-based groups of mothers who support each other. These groups are newly established and often draw on members from Community Support Groups established by UNFPA and Nutrition Volunteers from German Agro Action. MSGs were established in 22 villages and had 131 members by the end of 2011. MSGs provide a focal point for the delivery of health messages by IOM and BHS.

In early December 2011, IOM worked with BHS in Kathamyin Village to train 28 MSG members in nutrition awareness. Members of this group are expected to serve as peer educators to disseminate health information to other mothers in the community.

Raising Community Awareness

Short health education films were screened in tea shops and small cinemas on topics such as exclusive breast feeding and maternal and child health. Pamphlets and posters were also disseminated. Business owners were supportive of the initiative and it is estimated that films were screened 5,341 times in the fourth quarter. For frequent implementation of this initiative, broader support by private businesses may be required.

3.10 Skilled Birth Attendance

The proportion of births attended by skilled birth attendants such as midwives, nurses and doctors was between 50-71 per cent and 11-18 per cent for Auxiliary Midwives in 2011. Targets in Labutta and Bogale were 65 per cent and 62 per cent but achievement was 50 per cent and 52 per cent respectively. In Middle Island, Save the Children encouraged pregnant women to deliver at health centres and so achievement was 71 per cent, higher than the target of 65 per cent. In Dedaye, the target for skilled birth attendance was 53 per cent and achievement was 60 per cent.

The proportion of skilled birth attendance must improve if the logframe targets are to be met. Since good outputs do not always produce good outcomes automatically, analyses should be conducted across project areas by township medical superintendents and Implementing Partners to guide service delivery of midwives and AMWs.

Midwives attended 7,709 births out of 9,727 attended by skilled persons (44%) and Auxiliary Midwives 2,624 (15%) of total deliveries across project townships. A total of 21,827 (89%) of pregnant women received antenatal care at least once.

3.11 Psychosocial Health

In October 2011, a two-day training on psychosocial health was held in Pathein for township mental health teams from all project areas. Technical support was provided by the Department of Health.

3.12 Disease Control

Merlin installed six solar refrigerators during 2011 in RHCs and Station Hospitals in Labutta. Solar refrigerators were also installed at Thet Kal Thaung and Kyaut Ka Latt RHCs in Middle Island. IOM provided the Bogale DOH with 10 cold storage boxes and 20 vaccine carriers in the first half of the year. Immunization coverage increased in Bogale in April, in part because of the inclusion of two additional SRHC populations into the township project area. However, in May and June, EPI activities suffered due to heavy monsoon rains, which served to restrict people's movement.

3.13 Reaching hard-to-reach populations

Beneficiaries from hard-to-reach villages face limitations in accessing health services because midwives from SRHCs face logistical challenges in reaching such areas. For this reason, the role of VHWs is especially important. In Labutta, including Middle Island, AMWs cover 53 per cent of the 32 villages identified as hard-to-reach. In Bogale this is 35 per cent of 152 villages and in Dedaye it is 17 per cent of 24 villages. CHWs cover 78 per cent of these villages in Labutta, 70 per cent in Bogale and 35 per cent in Dedaye.

Workshops on reaching hard-to-reach and vulnerable populations will be conducted at the regional and township level in 2012 to improve understanding of hard-to-reach populations and inform better service delivery.

The second half of the year is characterised by an influx of fisheries, salt farm and casual labourers into areas of the delta such as Middle Island and the southern parts of Labutta and Bogale. This change in population

necessitates an expansion in health care services such as antenatal care and EPI coverage to more locations. The programme supported this in the first year by facilitating greater access to motorbikes and boats for health workers. New health service delivery points were announced to communities by VHCs in collaboration with salt-farm owners.

3.14 Health Emergency Preparedness and Response

Following discussion with Relief International and the township medical officer, community-based first aid training was provided by the Dedaye Township MRCS team in 18 village tracts for 360 participants as part of Health emergency preparedness and response.

The selection of trainees was based on criteria established by MRCS and candidates were chosen at the village level by MRCS together with village authorities. To monitor outputs, trainees were subject to testing before and after each training session. Attendance was recorded and practical exercises completed by each trainee. Relief International is considering whether or not to monitor community-based first aid trainees to determine how they are applying their training knowledge.

4 Implementation Challenges

Training

As the programme enters its second year, the training of Voluntary Health Workers is paying dividends in terms of service provision in outreach and hard-to-reach areas, especially in the Bogale and Labutta project areas where implementation started in May 2010. However, a number of challenges remain in the area of practical training experience for VHWs and their coordination with township authorities.

All Implementing Partners reported an insufficient number of trainers at the Township Health Authority. In Labutta, this problem was addressed by pooling staff from RHCs. In future, this limitation will be overcome through an improved training methodology and training of trainers courses planned in the programme's second year.

Some new Auxiliary Midwives in Labutta were not witnessing sufficient deliveries during their field training because they were sent to RHCs where only a limited number of deliveries were taking place.

Post-training monitoring of new AMWs revealed the following issues:

- Only 60 per cent of new AMWs had used the supplies and equipment provided to them.
- Provision of antenatal care to pregnant mothers varied by location and in some areas was less than 50 per cent.
- The AMW service was hindered by the young age of volunteers and their relative lack of standing in their communities. Working alongside midwives helped to resolve this issue.
- AMWs and Village Health Committees require greater support and motivation from IPs and Basic Health Staff if they are to improve health service delivery.

In Middle Island, the three-month theory course for AMWs could be improved. AMWs were taught by township health teams but could benefit from the availability of specialists working in the same training/hospital compound. Save the Children noted that township training teams should be strengthened.

There were 42 non-functioning VHWs out of 108 for refresher training in Middle Island. These health workers were classified as such because of inadequate supervision and malpractice. Save the Children could not reach its target for CHW refresher training because of high non-functioning rates. To solve this problem and maintain high coverage, the target for new CHWs was increased in the Phase 2 Joint Township Health Plan.

A number of Voluntary Health Workers become non-functioning following initial and refresher training courses. In addition, the quality of work by some VHWs is not satisfactory. These issues should be reviewed by township health departments and IPs to determine why and what action can be taken.

Existing township training teams are overworked and understaffed. This is particularly evident in Labutta District where two IPs are sharing the same training resources.

Nutrition

To accurately assess nutritional needs, BHS and AMWs will be provided with additional weighing tools in project areas, especially in Middle Island, so they can detect low birth weight prevalence among newborns. Currently, midwives and AMWs are equipped with weighing tools to monitor mothers and CHWs for under-5 children. In addition, CHWs in Middle Island require additional training if they are to conduct nutrition assessments. Although CHWs participated in a 30-day training course, this was not sufficient to equip them with the skills to assess nutritional status by MUAC, weight and height. Training of trainers courses on exclusive breastfeeding and infant and young child feeding will continue for Basic Health Staff and inform the work of Auxiliary Midwives.

IOM provided seed funding of 100,000 kyats each to cover the cost of establishing ten Village Food Banks. Many VFBs were unable to function effectively because communities contributed insufficient funds. IOM has implemented a number of nutrition activities compared with other IPs, however, the impact of these activities requires analysis to ensure that budget is being effectively utilised.

At the regional coordination meeting in March, a decision was made to review the programme's nutrition component. This process began in April and meetings were held with the Fund Management Office, UNICEF, IPs and the National Nutrition Center to develop activities. The recommendations informed Phase 2 planning and Joint Township Health Plans in the new townships so nutrition activities will be implemented to a greater extent than in the first year. The National Nutrition Center will provide nutrition trainers in early 2012.

Emergency referrals

The need to establish a working group to review the emergency referral procedures was also discussed at the regional coordination meeting in March, in part because of confusion about the limitations of referral support. Some pregnancy cases requested referral but could not be supported by the programme because there were no associated indications of EmOC. Screening of high-risk pregnancies and the provision of elective surgery under the emergency referral system should be considered so that pregnancies do not enter a life-threatening phase.

In some project areas the referral rate is twice that planned. The impact on medical supplies and hospitals should be considered in addition to that on budget, which could have consequences on the level of support available in 2012. A review of referrals is required to determine whether assistance is being effectively targeted at the people who need it most.

Programme coverage has been extended to Myaung Mya and Middle Island will be administered by Nga Pu Taw Township in future. For some people, the hospitals in Myaung Mya and Nga Pu Taw would be more suitable for referral than Labutta. Implementing Partners are investigating with the Fund Management Office ways in which these patients may be more effectively supported through other township hospitals. One option is to reimburse the costs of referral once a patient from one township is discharged from a hospital in another township. This reimbursement would be based on documents such as the discharge summary and receipts for expenses incurred. This option requires further discussion with the hospitals concerned. The second option is to reimburse transport and meal costs to patients only after discharge, and on provision of referral documents.

Data on emergency referrals and maternal and child death follow-up should be analysed to identify gaps in service provision and causes of death across different communities.

Access to health care services

Access to health services is a problem for poor people, especially mobile populations. Since they are mobile, information about their location and numbers are not known clearly. Targeting activities is particularly challenging because so many areas are hard-to-reach.

In all project townships, heavy rain and storms from May to October made transportation hazardous. This limited the number of outreach visits that could be achieved and also affected the ability of BHS to travel to monthly township meetings. The lack of direct public transportation to health facilities in some areas was also a limitation on outreach.

Follow-up on maternal and child deaths

In all townships, technical discussions should be planned with obstetricians, paediatricians and public health practitioners for the purpose of improving mortality analysis. Assistant surgeons/medical officers should conduct follow-up but this will be challenging since most are unavailable.

Rural Health Centre meetings

Each Implementing Partner has a different approach to organising and conducting RHC meetings. For example, in Dedaye quarterly meetings are conducted with VHWs at RHCs, while in Labutta, Merlin supports monthly meetings. In Middle Island, meeting with VHWs are organised at Sub-rural Health Centres.

In Bogale, the involvement of VHWs and VHCs in RHC meetings increased steadily. However, it was sometimes difficult to accommodate all the attendees and maintain the focus of discussion. Changes made in year two relieved some of the overcrowding but created challenges in other areas. For example, monthly data collection became more difficult because AMW/CHW attendance alternated. It is too early to determine whether a decrease in attendees improves meeting effectiveness. A strategy to improve communication among volunteers and health staff is necessary to ensure that all health workers stay informed.

Harmonisation with GAVI-HSS

The transfer to Middle Island to Nga Pu Taw Township could create overlap and discrepancies in support with the GAVI-HSS programme. It was found at the GAVI-HSS dissemination workshop in Nga Pu Taw that most unit costs do not differ significantly between the two programmes although this is not the case for activities and meetings. The differences in support to BHS are a major concern that needs addressing.

Infrastructure for Basic Health Staff

JI-MNCH does not provide support for infrastructure, despite the need in some areas. For example, half of the midwives in Middle Island do not have a SRHC. Save the Children has requested that the UNOPS Fund Manager and Steering Committee explore the possibility of providing funding for infrastructure. GAVI-HSS may also consider supporting the construction of SRHCs in Middle Island once it is integrated into Nga Pu Taw Township.

Definition of outreach and hard-to-reach areas

Department of Health guidelines on EPI have resulted in changes to outreach and hard-to-reach planning. Following discussion between IPs and the medical superintendent as follows:

- Within 5km: Midwife visits are reduced and mothers are expected to visit clinics (not including journeys by river)
- Within 5-10km: Planned as outreach visits

- Above 10km: Planned as mobile visits

Compared to Phase 1, the number of visits was reduced. For example, planned outreach visits in Labutta fell from 440 to 206 and hard-to-reach visits from 103 to 25. These schedule changes will not reduce travel times or the cost of travel to villages but will result in a budget reduction of around 23 per cent compared to Phase 1.

5 Lessons Learned

The experience gained by Implementing Partners during Nargis recovery has been vital to the effective coordination and implementation of programme activities at the township level. The roles and responsibilities of IPs were clarified during several coordination meetings organised in project areas and at the regional and central levels with the participation of Ministry of Health staff, township health teams, divisional health teams, UN agencies, the Fund Management Office and NGOs.

Collaboration between IPs and stakeholders at the township level is mirrored by stronger links between Basic Health Staff and Voluntary Health Workers, whom hold monthly RHC and SRHC meetings. In addition to identifying problems and improving service delivery, regular communication between health workers at the field level is believed to contribute to the low attrition rate among volunteers. Meetings were also conducted in Nay Pyi Taw with broad participation of MOH staff. Better understanding of coordinated township health plans by central, regional and township health In-Charge has been invaluable to planning and problem solving.

Maternal and child death analyses by diagnosis, time, place and service provider may guide programme planning, monitoring, and evaluation of the effectiveness of interventions and inform the allocation of resources. This exercise is planned in early 2012. Follow-up is also a useful tool in educating health volunteers and Basic Health Staff on timely referral of emergency cases and danger signs to watch out for in children, pregnant women and during childbirth. Follow-up information is discussed at RHC meetings.

A midwife meets with the community on an outreach visit

The practice of coupling antenatal care with immunization visits is proving effective. Home Based Maternal Records are provided to pregnant women and are linked to the emergency referral system with the support of Village Health Committee members. Pregnant mothers are more actively seeking antenatal care, which is giving rise to an increase in coverage.

Although the emergency referral system is now operating effectively across project areas, its application is uneven. Under the current system, IPs support EmOC and ECC referrals. IOM and Relief International refer life-threatening cases irrespective of age. Merlin and Save the Children only consider maternal and child cases for referral.

Health service providers working at the field level on complementary programmes should improve their coordination to avoid gaps and overlap in activities. Township health departments should take a leading role in developing coordinated township health plans. The Steering Committee recommended that Implementing Partners disclose all sources of funding for planned activities in both the joint township health plans and service agreements.

Changes to the frequency and attendance of RHC coordination meetings by some IPs should be monitored closely since it is not yet clear what the effect on long-term attendance and contact with health workers will be.

Involving all township health staff in the review of maternal and child deaths increased awareness of causes and resulted in more interest in prevention. Local health workers are responsible for investigating maternal and child deaths in villages. This information is shared at monthly coordination meetings with VHWs and VHCs. Their inclusion in this process is critical because it emphasises the importance of recognising danger signs so that such deaths can be prevented. However, in most project areas, medical doctors do not participate in follow-up activities. This limitation must be resolved if the quality of follow-up is to be improved because recorded causes of death have been found to be inaccurate in some cases.

Medical superintendents and IPs selected topics for Continuous Medical Education sessions, which were provided to health workers. These sessions developed the capacity and knowledge of Basic Health Staff and VHWs and were an effective use of time and money.

Work should continue on developing standard curriculums and guidelines for health actors such as micro plans for midwives. Technical assistance will be required from MOH for training courses, preparation of hard-to-reach workshops and dissemination of standard operating procedures. In areas such as emergency referrals and the treatment of severe acute malnutrition, coordinated approaches are not yet ready.

Communication should be improved horizontally and vertically between all stakeholders. In particular, clear roles and responsibilities must be identified between IPs, medical superintendents and BHS to avoid unnecessary delays to implementation and to maximise the achievement of logframe indicators. Greater transparency between IPs, medical superintendents and BHS is vital for building trust. IPs should continue to synchronise with the policies and strategies of DOH and MOH, and work together to develop new approaches as required.

6 Monitoring and Evaluation

Monitoring and evaluation is based on mechanisms established by the Fund Management Office, IPs and Township Health Departments, with the support of the JI-MNCH Advisory Group and Steering Committee.

When the programme started, planned targets were defined for the period until 2011, in line with funding commitments. The logframe format used for monitoring and evaluation was based on a DFID framework. However, with the extension of the programme until 2012, the logframe was updated with additional gender and community participation indicators by the Fund Management Office, IPs and BHS. It is in use by all IPs

The logframe output indicators demonstrate programme achievements and are used as a tool by IPs for fund mobilisation

Health outcomes in the project areas will be monitored through surveys proposed on an annual basis in each township. A Health Management Information System provides population data, vital data and project outcome data. In addition, IPs submit Quarterly Technical Progress Reports that include project output data and qualitative information.

Field monitoring visits were conducted by the Fund Management Office in Labutta, Bogale, Dedaye, Pyapon and Mawlamyinegyun townships in March, June, July, September and November, respectively. Information gathered from these trips was combined with that from routine information systems and Quarterly Technical Progress Reports for use in the semi-annual and annual reports. These reports pass through the Township Program Coordination Committee, Divisional Coordination Committee, Advisory Group and Steering Committee to ensure stakeholder participation and accountability.

Baseline and annual surveys are essential in measuring the programme's success and should be conducted in the first and last years in each project area. A draft survey protocol was presented at the Advisory Group meeting in December and a Technical Working Group was formed to develop it.

7 Coordination

VIP visits

On 4th July, Vice President Dr Sai Mauk Kham visited Bogale where he observed training of Community Health Workers. The Vice President expressed his satisfaction with the training.

JI-MNCH Annual Review Meeting

The Annual Review meeting for 2010 was held on May 6th 2011 in Nay Pyi Taw and was chaired by the Department of Health's Deputy Director General for Public Health, Dr Thein Thein Htay. The meeting was attended by WHO, UNICEF, DOH, Department of Health Planning, donors, IPs and other INGOs.

The objectives of the meeting were to review the progress and process of implementation up until December 2010, amend the programme as necessary and advocate for strengthened coordination at the field level.

Regional Coordination Meeting

This meeting was held in Yangon in March 2011 and was attended by 43 representatives from the Department of Health. It including staff from the Regional Health Department and five townships in Ayeyarwady Region, as well as participants from WHO, UNICEF, UNOPS, DFID, IPs and other INGOs, including Medecins du Monde, Marie Stopes International and Relief International.

The purpose of the meeting was to monitor progress, share best practices, discuss ways to strengthen coordination at all levels between stakeholders, advocate policy makers and administrators on ways to improve implementation, and identify challenges and find ways to overcome them collectively.

Steering Committee Meetings

The Steering Committee met six times in 2011 and is comprised of representatives from MOH, WHO, UNICEF, UNOPS, donors and INGOs. It provided approval and oversight for the budgets of the Fund Management Office and IPs, semi-annual and annual reports, proposals, operational guidelines and requests for additional funding.

Advisory Group Meeting

Two Advisory Group meetings were held in Nay Pyi Taw in March and December, attended by MOH, INGOs, UNICEF, WHO and UNOPS. Participants discussed child survival strategy, implementation of the emergency referral mechanism, documentation of lessons learned, definition of hard-to-reach populations, and the conduct of baseline and follow-up surveys. Merlin's Health Advisor, Ms Fiona Campbell, gave a presentation on the role of human resources in achieving the Millennium Development Goals.

8 Application for Additional Funding

Additional funding required to extend the programme to December 2012 is estimated at US$7,079,670. This funding will cover activities in five townships and six project areas.

Programme extension is focused on the needs of pregnant women and children under-5 years. It aims to improve access to quality basic maternal and child health services, particularly for vulnerable populations in

hard-to-reach areas. Psychosocial needs of the affected populations will also be met and mitigation of future disaster risks achieved though a focus on emergency preparedness.

Implementation of the JI-MNCH programme has led to new ways of working at the township level by incorporating a wide variety of stakeholders, one coordinated plan, one pooled fund and one monitoring and evaluation framework. The experiences and lessons learned will be useful for the 3MDG Fund and the Global Alliance for Vaccine Initiative and Health Systems Strengthening.

9 Phase 2 Work plans

Implementing Partner's prepared Phase 2 of the programme in their project areas under the leadership of the medical superintendent/township medical officer, making sure the process involved the participation of NGO/INGOs working on health issues and stakeholders at the township level. Activities correspond with those of the essential service package described in the Description of Action.

The Fund Management Office reviewed the planned activities under Phase 2 with the assistance of IPs, WHO, UNICEF and concerned national project managers. The Department of Health provided support as requested. Following the review, the Fund Management Office submitted Joint Township Work Plans, the operational budget and project implementation plan for Bogale and Labutta to the Steering Committee. They were approved on 22nd August 2011. The contracts to extend programme activities in Bogale and Labutta townships were signed by IOM and Merlin on 23rd August and 27th August, respectively. A contract amendment was signed with Save the Children on 28th November for Middle Island.

Development of the Phase 2 work plans was based on the outcome of the annual review meeting and the experience of implementation in the first year. This included feedback from Basic Health Staff coordination meetings and roundtable discussions involving IPs and the Fund Management Office, with additional technical assistance provided by WHO and UNICEF, especially in the area of nutrition.

Financial budgeting was based on unit cost analysis, which is becoming more accurate as the programme develops.

10 Extension into New Townships

The extension of programme activities into Dedaye, Pyapon and Mawlamyinegyun townships benefited from the lessons learned during implementation in the first year. These lessons informed the new Joint Township Health Plans and Phase 2 work plans, resulting in more realisable planned activities and a more accurate budget that is based on analysis and standardisation of unit costs, integrated trainings and improved coordination among Implementing Partners.

All six objectives outlined in the Description of Action are supported in 2011-2012 work plans. The National Nutrition Center and UNICEF are providing technical assistance on nutrition activities and are helping to refine the approach to targeting migrated male workers in Pyapon. Training will be improved in community newborn care and training management and hard-to-reach population workshops, surveys and research will be conducted to ensure quality implementation. More support will be provided in the form of Emergency Obstetric Care kits and hard-to-reach services.

Nonetheless, implementation in new townships will present difficulties, not least because all essential services are covered in the Joint Township Health Plan and the implementation period is only 12 months. IPs and medical superintendents should strive to implement activities as planned and MOH, donors and the Fund Management Office should provide oversight and additional support as required.

Pyapon and Mawlamyinegyun townships

Medical superintendents from Pyapon and Mawlamyinegyun were invited to the Advisory Group meeting in February, the regional coordination meeting in March and the annual review meeting in May. Eight INGOs working in the townships were invited by WHO and UNOPS to a meeting on 27th May at the WHO office in Yangon. The purpose of the meeting was to brief the INGOs on the expansion of the JI-MNCH programme and to solicit preliminary statements of interest

A meeting in Pathein with the regional health authorities and medical superintendent/township medical officer to discuss expansion of the programme in the townships took place in July. Joint assessments in Pyapon and Mawlamyinegyun were conducted in September to develop Coordinated Township Health Plans, which were submitted to the GAVI-HSS review group of MOH in October. Most IPs participated in the joint assessments to develop the Coordinated Township Health Plans. IOM collaborated with Save the Children in Mawlamyinegyun and Relief International supported Medecins du Monde in Pyapon. Representatives from the regional health department and Fund Management Office also participated**.**

Service agreements were signed with Medecins du Monde and IOM on 28th November 2011 for Pyapon and Mawlamyinegyun, respectively.

Advocacy Meetings

At the regional level, a meeting took place in Pathein on 29th July to discuss the implementation of Phase 2. Opening remarks were made by the Regional Social Minister.

The objective of the meeting was to share information about the JI-MNCH programme, including experiences of joint assessment/planning and to provide recommendations to improve these in new geographical areas; to seek endorsement for the planned activities in Dedaye Township, and to plan an assessment in Mawlamyinegyun and Pyapon by Save the Children and Medecins du Monde. IPs also shared implementation experiences.

In Middle Island, Save the Children with the station medical officer and Basic Health Staff, advocated a joint health plan for 2012. Achievements made in 2011 were also explained to the community in a display covering MNCH services available at health facilities.

11 Demand Side Approach

A health approach that focuses solely on providing inputs is unlikely to achieve significant gains because it ignores the diversity of needs within and across communities. The JI-MNCH programme recognises that a demand side approach, which takes account of health-seeking behaviours and patterns of utilisation within communities, is desirable if health interventions are to be improved.

Efforts to strengthen Village Health Committees, establish village trust funds, finance emergency treatment, set up emergency referral systems, and train Voluntary Health Workers were successful but greater work is needed to ensure a balance with supply side interventions.

In future, the programme will focus also on mapping the variety of health initiatives underway and building consensus on how best to move ahead with key lessons.

12 Operational Guidelines

In consultation with the Fund Management Office, a draft of the JI-MNCH Operational Guidelines has been written. Before the guidelines were submitted to the Steering Committee for approval, a consultation and review was undertaken with stakeholders, including IPs, WHO and UNICEF. The final draft was discussed at the Steering Committee meeting in December and approved with minor revisions.

13 Reporting to Ministry of Health

The State Peace and Development Council handed over power to the new, democratically elected government at the end of March 2011. A result of this change was the appointment of a new minister and vice ministers to the Ministry of Health. The country director of the Myanmar Operations Centre under UNOPS, the Fund Management Executive and programme managers from 3DF and Global Fund met with the new government staff in June to brief them on their programmes, governance structures and objectives.

A month earlier, MOH was informed of the programme's name change from Health PONREPP to Joint Initiative on MNCH. This name change puts the programme in line with government policy, which, following the end of the Tripartite Core Group and post-Nargis recovery phase, is focused now on the health of mothers, newborns and children.

14 Documenting Lessons Learned from JI-MNCH

Partners have expressed an interest in documenting lessons learned from the JI-MNCH programme. Four questions will provide the basis of the study:

- What is the impact of the programme?
- Has the programme reached the target hard-to-reach populations?
- What is the indirect impact of the programme?
- What would the cost and value for money be if the programme were scaled up?

To conduct this study, HEFE Consultants were contracted following a transparent bidding process. In September, the MOH agreed to conduct the exercise and a framework of study was developed in December by the Advisory Group, MOH and consultant. Focal persons were chosen from MOH and IPs to lead the study in each of the four areas. Based on the study framework, the consultant submitted a TOR and an inception report in December. Feedback from the Reference Group was provided and the report revised in early January 2012. The study will be completed in 2012.

15 Budget and Disbursement

Funds received until December 2011 consisted of US$3,443,623 from AusAID, US$4,502,481 from DFID and US$1,669,273 from Norway. Bank interest was US$26,531. A total of US$9,641,908 was received.

Fund expenditures consisted of US$413,950 for the operation of the Fund Management Office, US$91,463 for facilities and administration, US$2,448,237 for grants to IOM Geneva, US$686,191 for grants to Save the Children, US$2,259,845 for grants to Merlin, US$686,581 for grants to Relief International and US$408,684 for grants to Medecins du Monde. Total expenditure was US$6,994,951.

The balance as of 31st December 2011 was US$2,646,957.

For first year contracts, the budget absorption rates of IPs were: Merlin 80 per cent, IOM 86 per cent and Save the Children 73 per cent. There was no cost extension.

The expenditure of IPs was significantly below that planned despite the majority of activities being completed. This was because item, per diem and reimbursement of travel costs were standardised across IPs, with additional savings made in immunization and training activities. Competitive bidding among suppliers reduced the costs associated with equipping health facilities. In some cases, office running costs and support staff were shared with other funding sources.

16 Risk Assessment

Insufficient health staff

The public health system suffers from an inadequate number of health staff, which is a problem in project areas when conducting activities and data collection. The presence of sufficient health staff in hard-to-reach areas is a crucial factor in the achievement of project objectives but high turnover of Basic Health Staff in township health departments and vacancies in midwife postings are a challenge to vacancy tracking and a risk to the timely implementation of project activities.

More township health officers are needed to support medical superintendents at the township level if programme management, coordination and monitoring are to improve.

Access to essential services for hard-to-reach areas and populations

Barriers to the delivery of essential services for hard-to-reach areas and populations include seasonal population migration, unpredictable and unfavourable weather conditions and transportation access that is inadequate and expensive. Currently, health workers prioritise EPI because few visits can be made to hard-to-reach areas due to transportation costs. Supporting such costs allows the frequency of visits to increase, which in turn allows health workers to expand the provision of health care services.

Routine maternal, newborn and child health is improving gradually as a result of support for activities such as coverage of hard-to-reach areas for immunization services, antenatal care visits, health promotion and institutional deliveries. Coordination between local authorities, Basic Health Staff and Voluntary Health Workers has improved but issues remain such as a lack of awareness concerning health issues in communities.

Standardisation of policies and strategies

The programme relies on partnerships and has introduced activities that have not been widely implemented before. Though some policies, standard operating procedures and guidelines exist, not all are adequate, practical or initiated yet. Examples include the selection of Voluntary Health Workers, establishment of village trust funds and capacity building for Village Tract Health Committees.

Change in government

Following the change in government structure a need existed for advocacy and orientation sessions to be conducted at the township and divisional level. In July, the Fund Management Office held a meeting with the Regional Social Minister in Pathein to discuss plans, progress and advocate for improvements in specific technical areas.

Unfunded activities

In the programme's first phase, MNCH, EPI and nutrition were funded but activities under Health Emergency Preparedness and Response, and Demand Side Interventions were not. For the second phase, all activities detailed in the Description of Action are funded across all programme townships.

Monitoring and evaluation issues

Although a monitoring and evaluation framework was developed for the townships, the availability of data was a problem. The issues arising from this were discussed and appropriate action was taken through the Advisory Group and at township coordination committee meetings. This data is now used to improve planning and evaluation. However, there are still weaknesses in some data and gaps in routine reporting. A baseline and follow-up survey are required to triangulate the routine data.

Joint Township Work Plan unit rates

The Fund Management Office has studied the unit cost and rates used by IPs in an effort to harmonise costs. Programme and management costs for IPs in relation to the population and number of villages in their

project areas were also analysed with the aim of identifying and refining benchmarks, harmonising costs and, where possible, improving future programming.

Transfer of Middle Island to Nga Pu Taw

The transfer of Middle Island could result in support overlap and discrepancies between JI-MNCH and GAVI-HSS in Nga Pu Taw. The Steering Committee will discuss potential issues and explore options for resolving them with the GAVI-HSS programme manager.

Health grants

IOM will provide emergency health grants to VTHCs for maternal and child health emergencies. To avoid the potential misuse of funds, IOM will plan with BHS, VTHCs and VHWs to monitor the grants. With cooperation from World Vision, IOM will provide training to improve the capacity of VTHCs to manage the grants.

Sustainability of emergency health grants should be considered before and during implementation.

Voluntary Health Worker selection criteria

Although age and level of education are important, population size, distance from health facilities and the presence of alternative service providers can also affect the functioning status of Voluntary Health Workers.

Non-functioning VHWs are a risk to the successful implementation of activities at the community level. Clear guidelines on the selection of villages to host a VHW are essential if resources are not to be wasted on villages where the assistance of VHWs may have limited impact. These guidelines should consider the size and location of villages and the impact of alternative service providers.

Risk analyses in IP reports

In the third and fourth quarters, IPs in established project areas reported few risks compared with earlier quarters. In new townships, it will take time to strengthen relationships between IPs, health authorities and BHS. Communication skills and management capacity should be improved to minimise risks.

Sustainability

The coordinated health plan approach practiced by the programme is an important step towards improving the quality and accessibility of community health services. Its public-private partnership approach can serve as a model for the programme's expansion elsewhere in the country. However, the sustainability of these improved health services is not guaranteed in the long run. The potential for changing attitudes among health service providers must be taken into consideration because the programme is highly dependent on private sector support. In the absence of this assistance and the cooperation of IPs, there is a risk that BHS performance in routine implementation of township health services may diminish once the programme finishes. Steps such as greater capacity training for community health volunteers and VHCs could help communities to better manage their health care needs.

17 Conclusion

Programme implementation in the past year was marked by consolidation in Labutta, Bogale and Middle Island, where project activities began in 2010, and expansion into Dedaye, where activities started in June. Core elements of the programme such as EPI coverage, outreach activities and emergency referrals for maternal and under-5 children have delivered strong results. Coordination mechanisms proved robust at the regional, township and field levels. Cooperation with MOH was strong and technical support increased with the provision of trainers for township mental health teams and more field visits to monitor programme activities.

In late November, service agreements were signed with Medecins du Monde and IOM for the expansion of activities into Mawlamyinegyun and Pyapon townships. The planning process was undertaken quickly and effectively and benefited from the implementation experience in other project areas and coordination between all stakeholders.

Progress was made on a number of issues identified in the first six months of 2011. The sharing of data with Basic Health Staff was improved and the Fund Management Office successfully reviewed unit and per diem costs, which led to a reduction in budget expenditure even though the majority of activities were completed. The process to document lessons learned from the programme is well underway and should be completed in 2012 with the support of MOH. In an effort to improve service delivery to hard-to-reach populations, preparation with MOH is on going to conduct a township level workshop on situation analysis and a regional level workshop on strategic planning. The creation of a health emergency preparedness plan for hard-to-reach areas will be a priority also.

Despite these achievements, significant challenges remain. A review of the emergency referral system will take place to ensure the system is effectively targeting poor and hard-to-reach populations. A community-based maternal and child health/baseline and follow-up survey will be conducted. More attention will be given to sustainability, particularly in the areas of capacity building for VHCs and the management of revolving funds.

The programme continues to enjoy the trust and collaboration of all stakeholders and is achieving its goal of increasing access to maternal and child health services among poor and hard-to-reach populations. The programme has paved the way for other donor initiatives in Myanmar and will strive to complement efforts by GAVI-HSS, and the 3MDG fund in the coming year.

The programme wishes to thank donor countries, the Ministry of Health and Implementing Partners for their continued support towards improving maternal, newborn and child health in the Ayeyarwady Delta.

18 Stories

A motorbike makes a difference

Daw Aye Aye Thaw, Midwife at Pyin Kha Yaing Rural Health Centre and Chaung Wa Sub-rural Health Centre

I have worked as a midwife serving mothers and children for over 30 years. Now, at 54-years-old, I am close to retirement and Pyin Kha Yaing village will be my final posting. I cover a total of 18 wards with a population of 8,481.

The midwife services we provide to pregnant women and children are essential to the well-being of families: pregnant women are delivered safely and children remain healthy thanks to immunizations. Families can enjoy greater happiness but there are some limitations in my capacity to serve all pregnant women and children.

Daw Aye Aye Thaw on an outreach visit

Each month we go to Laputta Township to collect vaccines. Since there is no regular boat travelling there directly, we have to make an overnight trip by boat to Pathein and then curve back to the town. The whole trip takes four days. Add to this the 12,000 kyats I have to spend on motorcycle taxi charges so that I can conduct immunization sessions. Each month I would spend over 17,000 kyats on immunizing children and pregnant women in my villages.

In April I took on responsibility for the Sub-rural Health Centre in Chaung Wa because the midwife position there is vacant. It takes half an hour to get there by motorbike from my host centre and includes nine wards and five villages with a population of 5,331.

I found that I could not spend enough time providing quality antenatal care, post delivery care and immunization sessions in all the villages. I had to take a motorcycle taxi everywhere but financial constraints meant that I could only hire the bike for a limited period. Because of this I couldn't wait long for all the pregnant women and children to come to me at immunization sessions and clinics. This was a real constraint for me.

Having a motorbike saves Daw Aye Aye Thaw time and money

The JI-MNCH coordinated work plan assessed my situation and provided me with a motorbike. This has solved the constraints in my work. With the motorbike I can drop-in on families at home to provide immunizations. In September, I visited three families and called children to immunization sessions. I could also spend more time at immunization sessions and on health education with mothers.

Another benefit is that I can travel immediately to provide timely care for emergency pregnancies and standard postnatal visits. This is especially important for Chaung Wa Sub-rural Health Centre because it is half an hour away from my host centre. In the past I could not provide frequent postnatal visits for mothers and newborns because I was overloaded with work and could not afford the taxi charges. Now, I can. I'm also planning special antenatal care sessions for vulnerable pregnant women in my coverage area.

In the past I would spend over 35,000 kyats each month on providing immunization services to mothers and children. The transport costs were a burden for me but with the support of a motorbike, I only have to spend about 10,000 kyats per month on fuel to cover 27 wards and six villages under two Sub-rural Health Centres.

Emergency referral support saves lives

U Aung Win, a village administrator from Daunt Gyi village in Dedaye Township

People from my village mostly depend on farming or selling fish and frogs to make a living but this is barely enough to meet their needs. The villagers have little knowledge about health and no recourse to seek medical assistance even for life threatening cases. No matter how much we encouraged or advised pregnant women to go to hospital to give birth, they could not afford the travel costs. Even if the whole village were to have pooled money it would still not have been enough so our awareness raising efforts and advice were often pointless.

In many hard-to-reach areas, travel is only possible by boat

Most women give birth with the help of Traditional Birth Attendants and we saw a number of deaths during delivery. Since we could not do nothing but give advice, there was nothing we could do but watch wearily and feel helpless.

But during the Mi Chaung Aing Rural Health Centre meeting in September 2011, I was informed that the JI-MNCH programme would provide financial support for the poorest people in the event of an emergency. Also, the programme would provide me with information so that I would be able to identify potential emergency cases.

This made me think of Ma Htwe, a pregnant woman from my village. Ma Htwe is 36-years-old and has three children. She gave birth to her previous children with the help of Traditional Birth Attendants from the village. During her fourth pregnancy, she did not look healthy. She was pale and weak and so we asked her to speak with the midwife who then referred her to the township hospital. The baby was born by normal delivery at Dedaye Township Hospital. The JI-MNCH programme supported the boat charges, treatment and meal costs. Now both the mother and the baby are healthy and have returned home. I'm really glad that the referral support system can save so many lives. I think I have gained spiritual merit just by spreading news about the programme to other villagers, thereby helping to solve their problems and save lives. This is why I've been telling pregnant women from my village, 'If you face any kind of emergency during pregnancy, we can help'.

Helping the vulnerable in hard-to-reach areas

A Village Health Committee member from Taw Ka Mei village tract

There is a 17-year-old pregnant woman in our village with a mental disorder. She was close to delivering her baby but is poor and does not have any relatives in the village, which is in the southernmost part of Dedaye Township and is classed as hard-to-reach. The health assistant and midwife from Taw Ka Mei Rural Health Centre spoke with us when they visited our village and advised us to take care of her and ensure that she delivered safely. The pregnant woman lacked health knowledge and awareness of antenatal care services.

A Village Health Committee meeting

When she was about eight months pregnant, she started to have

labour pains even though she had been receiving regular antenatal care and medical treatment from the health assistant, lady health visitor and midwife. We immediately collected financial donations and wrote a recommendation letter for her so that she could be admitted to the township hospital for safe delivery because she had premature labour pains.

The woman had no money so well-wishers from the village contributed a total of 60,000 kyats to cover the expenses of hiring a boat and other costs. Thanks to the effort of the Village Health Committee members and villagers she was able to get to the hospital by boat without incident. She was later reimbursed 50,000 kyats as the emergency referral system supported by the JI-MNCH programme covers transport, meals and treatment costs.

The baby was delivered prematurely and was stillborn but we were able to save the mother's life. I think this was because of the joint efforts of our Village Health Committee members, the villagers and the JI-MNCH programme.

Refresher training helps Auxiliary Midwives work better

Auxiliary Midwife Daw Yin Yin Mwe from Ma Yan Wa village, Dedaye Township

I have been an Auxiliary Midwife for over 20 years and have attended a total of 1,016 deliveries. In November 2008 during Auxiliary Midwife refresher training in Pyapon.

Previously, it was hard for us to deliver babies safely due to a lack of materials. We had to buy basic things like cotton, spirited alcohol, gloves, scissors and soap. We didn't have any instruments either. Mucus from a baby would get into my mouth during resuscitation despite using a thin cloth barrier. Because we didn't have a sphygmomanometer, we had to estimate the blood pressure of pregnant women. When Cyclone Nargis struck our township, things got even worse. People were left homeless, all my possessions were destroyed and my delivery kit was swept away with water.

An Auxiliary Midwife is trained in child resuscitation

In December 2011, I attended an Auxiliary Midwife refresher course provided by the Dedaye Township Health Department in collaboration with Relief International. Lessons from the training were really helpful for me, especially the lessons on signs and symptoms of high-risk pregnancies, newborn emergency care, and other dos and don'ts. I could also learn about basic Emergency Obstetric Care.

I was really pleased to receive an Auxiliary Midwife kit after the training. I really appreciate it. Now I can carry out my duties more efficiently and effectively: I can accurately measure the blood pressure of pregnant women with a sphygmomanometer and refer those with high pressure to the midwives. Because the Auxiliary Midwife kit includes essential supplies like tubes and masks for resuscitation, clean delivery kits, gloves and soap, it is easier for me to conduct safe deliveries.

In addition to improving my medical knowledge, I have had the opportunity to learn about disaster risk reduction, which is very beneficial. This is why I'm so thankful to the Dedaye Township Health Department and the assistance of the JI-MNCH programme.

Reaching vulnerable communities in Middle Island

Between October and May each year over 1,000 workers travel from Upper Myanmar with their families to work on salt and prawn farms in Ngak Kyun (Bird Island), which is located in the Middle Island area of Labutta Township. In total, there are 23 salt farm and prawn pool plots and 500 permanent residents scattered about the island with about 30 under-one children and 20 pregnant women coming to the area each year with their partners for the working season. This mobile population does not register with the local authorities so Basic Health Staff are unable to update population data on the island.

Boat is the only means of reaching health facilities but travel is not possible at low tide. The nearest Rural Health Centre at Thet Kal Taung is four hours away. High transport costs and the loss of wages deter many pregnant women from travelling to the health centre so emergency cases are not referred quickly. The physical barrier of Ngak Kyun Island together with the economic barrier faced by mobile workers limits access to quality health services.

A mother with her newborn child

National Immunization Day in 2010 provided an opportunity to improve coordination of health services in the area. Health assistant Daw Thet Mar Myint led a Rural Health Centre team to collect population data for the island with a view to expanding immunization services for mothers and children. In February 2011, the team hired a boat for 30,000 kyats to reach Ngak Kyun and provide health services. The cost of transportation was a major constraint to Basic Health Staff.

In December 2011, implementation of the Joint Township Health Plan developed under the JI-MNCH programme started in the area. Transportation costs for immunization sessions were supported, removing one of the principal barriers to the provision of essential health care services for vulnerable communities in Ngak Kyun Island. The rural health team visited monthly, conducting immunizations and health education sessions focused on beriberi and danger signs in mothers and children.

In February and July 2011, the programme also supported the provision of a telephone and referral boat to Thet Kal Taung RHC. This support made possible the emergency referral of a 43-year-old woman suffering from post partum haemorrhage to the Station Hospital. Delay was caused by the rising tide but life saving care was provided by health workers trained in Emergency Obstetric Care with telephone support from JI-MNCH on emergency procedures given by the station medical officer at Pyin Kha Yaing Hospital.

The JI-MNCH programme provided a mobile phone to a RHC.

Basic Health Staff and Save the Children jointly organised Village Health Committee meetings from April 2011 and encouraged salt farms owners to work with Basic Health Staff to provide maternal and child health services for salt farm workers. Rural health teams provided special clinics on Wednesdays for pregnant women working at salt farms on Ngak Kyun Island. Importantly, women can receive antenatal care without the loss off wages for time off and salt farm owners have agreed to inform Rural Health Centres about pregnant women that have not received antenatal care.

Annex A – JI-MNCH Indicator Achievements

	Labutta (Merlin)		Middle Island (Save The Children)		Bogale (IOM)		Dedaye (RI)		All Project Sites	
Goal: Improve maternal and child health in the townships most affected by Cyclone Nargis										
Indicators	2011 Target	2011 Actual	2011 Target	2011 Actual	2011 Target	2011 Actual	2011 Target	2011 Actual	2011 Target	2011 Actual
Proportion of malnourished children between 6 months to 5 year of age (Global Acute Malnutrition)	2%	Survey not done	2%	Survey not done	2%	Survey not done	2%	Survey not done	2%	Survey not done
Number of unintended pregnancies averted	New indicator	NA	New indicator	NA	New indicator	NA	New indicator	NA	New indicator	NA
Purpose: To increase access to essential maternal and child health services in the townships most affected by Cyclone Nargis										
Outcome indicators	2011 Target	2011 Actual	2011 Target	2011 Actual	2011 Target	2011 Actual	2011 Target	2011 Actual	2011 Target	2011 Actual
Percentage of births attended by skilled and/or trained personnel	65% Skilled Birth Attendants 17% AMW	3871, 50% Skilled Birth Attendants 1145, 15% AMW	65% Skilled Birth Attendants 17% AMW	960, 71% Skilled Birth Attendants 186, 14% AMW	62% Skilled Birth Attendants 20 % AMW	2905, 52 % Skilled Birth Attendants 989, 18% AMW	53% Skilled Birth Attendants 12 % AMW	1991, 60 % Skilled Birth Attendants 379, 11% AMW	No target set	9727, 54% Skilled Birth Attendants 2624, 15% AMW
Proportion of one year olds vaccinated against diphtheria, pertussis and tetanus (DPT3)	7945 86%	8807 95%	1754 86%	1779 87%	7201 93%	7661 99%	3603 90%	3318 83%	20503 89%	21565 94%
Proportion of one year olds vaccinated against measles	7853 85%	8519 92%	1734 85%	1751 86%	7124 92%	7226 93%	3603 90%	3493 87%	20314 88%	20989 91%
Proportion of pregnant women vaccinated against tetanus toxoid	8763 87%	9679 96%	1937 87%	2039 92%	7687 91%	8224 97 %	3798 90%	3999 95 %	22185 89%	23941 96%
Outpatient visits per capita per year	0.3	0.3	0.3	0.2	0. 15	0.19	1.7	1.7	No target set	
Proportion of children under-5 years with diarrhoea receiving oral rehydration therapy	60%	97%	60%	95%	60%	97%	60%	100%	No target set	

Output: Maternal and child health															
Indicators	2011 Target	2011 Actual	Achievement (%)	2011 Target	2011 Actual	Achievement (%)	2011 Target	2011 Actual	Achievement (%)	2011 Target	2011 Actual	Achievement (%)	2011 target	2011 Actual	Achievement (%)
Percentage of pregnant women who received antenatal care one or more times	8259 82%	9217 92%	112	1826 82%	1704 77%	94	7349 87%	7894 93%	107	3587 85%	4009 95%	83	21021 84%	21827 87%	104
Proportion of RHCs / SRHCs with no stock out of antibiotics and ORS during the past six months	100%	100%	100	100%	100%	100	100%	100%	100	100%	100%	100	100%	100%	100
New Auxiliary Midwives trained	25	25	100	42	42	100	96	75	78	20	20	100	183	162	89
New Community Health Worker trained	25	25	100	46	46	100	269	187	70	67	67	100	407	325	80
Coordinated Township Health Plan in place	Yes	Yes	100	Yes	Yes	100	Yes	Yes	100	Yes	Yes	100	Yes	Yes	100
Monthly Township Health JI-MNCH meeting conducted with BHS	12	12	100	12	12	100	12	12	100	6	5	83	42	41	98
Monthly RHC meetings with BHS and Volunteer Health Workers	148	148	100	48	48	100	108	108	100	48	48	100	352	352	100

Township supervision of RHCs by the supervisory team	38	28	74	24	8	33	29	20	69	27	28	104	118	84	71
Routine outreach visits	3696	4318	117	1200	716	60	2116	3240	153	600	388	65	7612	8662	114
Hard-to-reach outreach visits	762	877	115	240	62	26	526	648	123	120	76	63	1647	1663	101
Maternal death follow-up visits and report	19	2	10	10	1	10	18	10	55	5	5	100	52	18	34
Child death follow-up visits and report	22	48	215	50	33	66	25	23	93	40	0	0	137	104	76
Number of referrals for EmOC & ECC	989	1010	102	270	529	196	587	1165	199	400	409	102	2246	3113	139
Provision of RHC drug kits	11	11	100	8	4	50	18	18	100	16	0	0	53	33	62
Provision of SRHC drug kits	52	50	96	40	14	35	35	45	128	18	0	0	162	109	67
Provision of emergency health care drugs / Drug Kit (UNICEF Kit) for Station Hospitals	6	6	100	Not included in STC work plan			6	5	78	6	0	0	15	11	71
Provision of clean delivery kits to RHCs and SRHCs	6871	4810	70	2700	1350	50	640	1271	199	2500	5000	200	12711	12431	98
Percentage of villages with AMW in hard-to-reach areas	70% of 25 H2R villages	10 villages 40%		70% of 7 H2R villages	7 villages 100%		70% of 152 H2R villages	52 villages 35%		40% of 23 villages	4 villages 17%		67% of 207 H2R villages	73 villages 35%	
Percentage of villages with CHW in hard-to-reach areas	70% of 25 H2R villages	19 villages 76%		70% of 7 H2R villages	6 villages 86 %		70% of 152 H2R villages	107 villages 70 %		74% of 23 H2R villages	8 villages 35%		70% of 207 H2R villages	140 villages 68 %	

Annex B – Continuous Medical Education sessions

Month	Name of CME session (Township BHS)	Name of CME session (RHC -VHW))
Sep-11	Health Management Information System refresher training	Maternal and child mortality for VHW refresher training
Oct-11	Stress Management Training for BHS	Maternal and Child Health Awareness training to for Community Support Groups.
Nov-11	Integrated Immunization refresher training to BHS	Birth Spacing
Dec-11	EWARS system	Beri Beri, Deworming
Jan-12	Measles, NNT and AFP	Awareness raising sessions on EBF for pregnant and lactating mothers (incl. influential community members)
Feb-12	Non-Communicable Diseases (Hypertension)	Measles, NNT and AFP
Mar-12	Disaster Risk Reduction and preparedness training, Heat Stroke	Non-Communicable Diseases (Hypertension)
Apr-12	GE and Environmental Sanitation	Disaster Risk Reduction and preparedness training, Heat Stroke
May-12	Quality antenatal and postnatal care	GE and Environmental Sanitation
Jun-12	Danger Sign and High risk Pregnancy (WCHD)	Quality antenatal and postnatal care
Jul-12	Importance of Nutrition & Malnutrition	Danger Sign and High risk Pregnancy (WCHD)
Aug-12	Breast Feeding & Maternal Nutrition	Importance of Nutrition & Malnutrition
Sep-12	HIV and PMCT	Breast Feeding & Maternal Nutrition
Oct-12	Leadership and Management Skill	HIV and PMCT
Nov-12	ARI and TB	Emergency Newborn Care
Dec-12	Emergency Newborn Care	ARI and TB