



MYSAP Communication Approaches for Sustainable Aquaculture Development and Improved Human Nutrition in the Sagaing Region and the Shan State of Myanmar















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MYSAP Communication Approaches

About MYSAP

The Multiannual Indicative Programme (2014-2020) identified that approximately one third of children in Myanmar suffered chronic undernutrition (stunting), the nationwide prevalence of moderately underweight children was 32% and the mean proportion of total household expenditure on food was 68%. Fish provided more than 70% of animal protein, with mean consumption levels estimated to be from 20 to over 40 kg per person per year. However, compared to other neighbouring countries aquaculture only provided a small proportion of the total fish consumed because of localized production, relatively high prices, difficult logistics and high post-harvest handling losses. Seasonality, poor infrastructure (transport and electricity) and lack of post-harvest technology, meant that a large part of fish consumed was either dried or in the form of fish pastes, with associated loss of vitamin A, increased salt content and possible adulteration with formalin and pesticides which can be harmful to human health.

MYSAP addressed the following constraints to aquaculture:

- Provision of extension and training services on aquaculture and human nutrition;
- Promotion of enabling policy and legislation;
- Making quality aquaculture inputs, including high quality seed for stocking into growout ponds, readily available;
- Supported hatchery and nursery production facilities;
- Promotion of improved biosecurity and disease management and control;
- Facilitated the involvement of small-scale producers in the value chain;
- Sustainable intensification of small-scale aquaculture;
- Promotion of climate change smart aquaculture production systems; and,
- Support for vocational and higher aquaculture education, training and extension services.

By doing the above, MYSAP increased the proportion of fish available in Myanmar from aquaculture which improved the household nutrition, livelihoods, health, income and food security of direct beneficiaries and had other impacts on indirect beneficiaries, including greater availability of cultured fish, at affordable prices, in local markets.

From its commencement in 06 April 2017 until 31 May 2020, the inland component of MYSAP conducted field activities in five townships, namely:

- i) Kale (നഡേ: MMR005027) Township, Sagaing Region
- ii) Shwebo (ရွှေဘို MMR005004) Township, Sagaing Region

- iii) Kengtung (ကျိုင်းတုံ MMR016001) Township, Eastern Shan State
- iv) Pinlaung (ပင်လောင်း MMR014009) Township, Southern Shan State
- v) Amarapura (အษฤบุค MMR010006) Township, Mandalay Region.

For the costed extension year, 01 June 2020 to 31 May 2021, approved by the 3rd supplement to the grant agreement, the inland component of MYSAP conducted field activities in three townships, namely:

- i) Kale (നഡേ: MMR005027) Township, Sagaing Region
- ii) Shwebo (ട്രേho MMR005004) Township, Sagaing Region
- iii) Kengtung (ကျိူင်းတုံ MMR016001) Township, Eastern Shan State.

During the inland component of MYSAP implementation period, season-long extension and training services on small-scale aquaculture, integrated vegetable and fruit production and the promotion of improved human nutrition were provided to a total of 1,504 direct beneficiary households with over 7,500 household members through three sub-contracted non-government organizations, namely Ar Yone Oo, BRAC Myanmar and Malteser International, operating in Kale, Shwebo and Kengtung Townships respectively.

Acknowledgments

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Table of contents

MYSAP Communication Approaches	1
Background	1
Verbal Communication	5
Non-Verbal Communication	7
Post-Harvest and Quality Control Training	8
Written Communication	9
Visual Communication	.14
Conclusions	.16

MYSAP Communication Approaches

This primary purpose of this report is to describe the different communication approaches used by the inland component of MYSAP, so that other development professionals may learn and benefit from MYSAP communication approaches and experiences, including those that went well and those that required revision.

The inland component of MYSAP provided extension and training services to a diverse target group of direct beneficiary households across 5 townships of Myanmar with different educational backgrounds, reading and writing abilities, different native languages and different ethnic and cultural groups, from 06 April 2017 until 31 May 2021.

The inland component of MYSAP conducted field activities in Myanmar during 14 months of COVID-19 pandemic and 4 months of operations under a state of emergency following a military coup.

Background

The Oxford English Dictionary defines communication (noun) as "the activity or process of expressing ideas and feelings, or of giving people information," and says that speech is the fastest method of communication between people, with messages travelling at the speed of sound or 1,235 km per hour.

At its simplest, communication is the act of transferring information from one place, person or group to another. Each communication has a minimum of one sender, a message and a recipient.

For the inland component of MYSAP communication process, the main message deliverers were the field staff of three collaborating non-government organizations (NGO's) namely Ar Yone Oo, BRAC Myanmar and Malteser International which were contracted by the inland component of MYSAP under sub-grant agreements to deliver extension and training services in Kale, Shwebo and Kengtung Townships respectively.

Key messages on how to produce integrated fish, vegetable and fruit production from small-scale aquaculture ponds, pond embankments and homestead gardens, and the importance of improved human nutrition, eating a balanced and diverse diet, and the benefits of eating fish for pregnant and lactating women and children under five years' of age in particular were first delivered to the field staff of the three collaborating NGO's, through MYSAP funded Training of Trainer (TOT) training courses.

During the inland component of MYSAP implementation period a total of five TOT training courses were delivered being two combined small-scale aquaculture, integrated vegetable and fruit production and improved human nutrition TOT courses in Mandalay City in June and July 2018, and one combined course in Kale Township in June 2019 and thereafter by a separate virtual small-scale aquaculture and integrated vegetable and fruit production TOT training course in September 2020 and a separate virtual improved human nutrition, WASH and COVID-19 prevention TOT training course in November 2020.

MYSAP TOT training developed a cadre of 37 (17 \circlearrowleft ; 46%) NGO staff trained by medical and nutrition advisors from Save the Children and WorldFish on *Improved human nutrition and the benefits of eating a balanced and diverse diet*, and by WorldFish specialists on *Small-scale aquaculture and integrated vegetable and fruit production*, who have between 1-3 years of experience of delivering season-long extension and training services on small-scale aquaculture and integrated vegetable and fruit production and improved human nutrition and the benefits of eating a balanced and diverse diet to direct beneficiary households.



Virtual training on small-scale aquaculture and integrated vegetable and fruit production for community facilitators.

The recipients of the inland component of MYSAP messages, delivered by the field staff of the 3 collaborating NGO's were poor and vulnerable households and their family members with a small-scale pond, defined as a pond of less than 0.5 acres (2,023 m²) in area which held water for at least six months per year. The majority of direct beneficiary households which MYSAP supported were rural households conducting a variety of agricultural activities to support themselves. The inland component of MYSAP therefore began by contracting the collaborating NGO's to facilitate the production of agriculture activity calendars by both women and men, in order to determine when the majority of collaborating households could attend season-long training at appropriate times of the year in the fish, vegetable and fruit production seasons.

The collaborating NGO's formed groups of typically 10-20 households per group and each group was facilitated to select a respected and motivational farmer (woman or man) as the demonstration farmer for the group, and whose household pond, pond embankments and homestead garden, with all inputs funded by MYSAP, was used as the location of experiential training sessions for group members on small-scale aquaculture production and integrated vegetable and fruit production and improved human nutrition and the benefits of eating a balanced and diverse diet including fish and especially nutrient and mineral dense small indigenous fish species.

The season-long training sessions built strong relationships between the NGO staff and group members, allow learning by seeing and doing, and cross-learning and sharing of information as group members exchanged information on their progress and compared that with that of the demonstration household results and other fellow group member households.

While having a sender, a message and a recipient may sound simple, the reality is that effective and two-way communication is a complex subject and requires a methodology designed to fit the specific context within which the communication takes place.

For the inland component of MYSAP some of the key contextual parameters that impacted on the design of communication processes included for example at the very least i) the education level of the recipient, ii) their ability to read and write and iii) the first language of the recipient and these parameters varied greatly both between townships, but also within townships and between different ethnic groups. For example, in Kengtung Township the proportion of people unable to read and write in Myanmar language was 65.9% compared to 14.5% and 0.5% for Kale and Shwebo Townships respectively. Shan language was the first language of the majority of households in Kengtung Township and not Myanmar language. All these contextual parameters were considered when the inland component of MYSAP staff and the collaborating NGO's, namely Ar Yone Oo, BRAC Myanmar and Malteser International designed and planned extension and training service delivery in Kale, Shwebo and Kengtung Townships respectively.

There are typically four main approaches to communication, being i) verbal, ii) non-verbal, iii) written, and iv) visual. MYSAP used a combination of all the main four communication approaches to deliver and reinforce its messages on small-scale aquaculture, integrated vegetable and fruit production and value chains, and improved human nutrition and the benefits of eating a balanced and diverse diet which included fish.



Training of trainers on small-scale aquaculture and improved human nutrition promotion in Kale Township.

Verbal Communication

MYSAP and collaborating NGO staff used verbal communication for the delivery of key messages on most topics during face to face training, video conferences and webinars, via training videos and via mobile phone, as this allowed even illiterate people to understand the messages.

To improve the effectiveness of verbal communication, the inland component of MYSAP ensured there were NGO staff on hand for all training sessions delivered in Kengtung Township that provided simultaneous translation from Myanmar language into Shan, Lahu and Arka languages, while in Kale Township that there were Chin language dialect speakers to translate, to ensure the full understanding of messages by household members whose first language was NOT Myanmar language.

The inland component of MYSAP continued to operate during 14 months of the novel coronavirus 2 (COVID-19) pandemic when activities to increase the resilience and the ability of poor and vulnerable households to produce essential food items including fish, vegetable and fruit were even more relevant than when MYSAP was originally designed. Field staff of collaborating NGO's conducted measures to reduce the likely contagion and spread of COVID-19 by keeping group sizes small when face to face meetings were allowed, by conducting digital temperature checks, using hand sanitizers, donation of face masks and giving strict instructions on maintaining social distancing.

When face to face meetings were forbidden during the COVID-19 pandemic, the inland component of MYSAP made increasing use of digital platforms like Teams, Zoom and Viber to deliver webinars and virtual training courses on small-scale aquaculture and improved human nutrition for both the inland component of MYSAP and NGO staff, and direct beneficiary household members, including fish vendors and fish smokers.

Below are some examples of effective verbal communication practiced by the inland component of MYSAP:



Training delivery on the production of sinking pelleted fish feed in Shwebo Township.





A lessons learned workshop held in Kengtung Township, where the majority of participants were Shan, Akar and Lahu. Community facilitators assisted in the simultaneous translation from Myanmar and English languages into Shan, Akar and Lahu languages respectively.



Two staff of the inland component of MYSAP conducting a barrier analysis questionnaire survey to identify the constraints to mothers feeding more fish to children under five years of age, in Shwebo Township.





Training of trainers on small-scale aquaculture (SSA) and improved human nutrition for community facilitators in Kale Township.

Non-Verbal Communication

Non-verbal communication is the transmission of messages or signals through a non-verbal platform such as eye contact, facial expressions, gestures, posture, body language and the distance between two individuals. The way you listen, look, move, and react, inform the person you are communicating with whether or not you are listening to them, and whether you care and empathize with them. MYSAP funded delivery of TOT courses for collaborating NGO field staff, which covered effective non-verbal communication elements including facilitation skills like praising people for answering questions, paraphrasing farmer responses in a slightly different manner to confirm that something has been correctly understood and providing constructive rather than destructive feedback to participants. TOT participants learned how to stand and sit, postures, hand gestures and facial and eye movement techniques which were less threatening or intimidating to the trainees and which encouraged trainees to share their opinions, and to ask and to answer questions. This stimulated more active participation of all training participants.

The following are examples of non-verbal communication;





Practical training on post-harvest fish processing and how to throw a cast net for community facilitators in Kale Township.

Post-Harvest and Quality Control Training

Prior to COVID-19 the inland component of MYSAP delivered three face to face practical hands-on post-harvest fish preservation and quality control training courses in October and November 2019 for a total of 90 people (67 ♀) in Kale, Shwebo and Kengtung Townships. This activity was targeted at small-scale fish vendors and fish traders to teach them both better handling practices for fish after harvest from the pond and fish preservation methods that allowed vendors to add value to and to extend the shelf life of their product, while giving increased household income and improved family nutrition and especially of young children.

The practical training was delivered over 2 consecutive days and the main topics covered included:

- The importance of observing personal hygiene and sanitation when handling fish and other fishery products.
- Improved knowledge of fish vendors and fish traders on the different characteristics of fresh fish and its nutritional content.
- New information and techniques to maintain fish quality for longer and to ensure that the quality of the preserved fish produced was safe for consumption.
- Preserving excess fish using three or four different fish preservation techniques 1) dried fish, 2) salted fish, 3) fish paste and 4) fermented and pickled fish that will support improved family income.

In the last quarter of 2020 Asper Consulting Limited operating under an MYSAP international consultancy contract conducted virtual scoping missions and interviews of fish vendors and fish processors during COVID-19 travel restrictions. Thereafter in quarter of 2021 Asper Consulting Limited delivered virtual post-harvest better management practices training for both vendors and NGO staff from Kengtung, Kale and Shwebo Townships and tested a facilitator guide to be used for peer to peer training entitled, *Good post-harvest practices for fresh fish trading* in English, Myanmar and Shan languages, using the digital platform Zoom.

The training empowered women and men fish vendors by not only improving the quality of their fish products, their shelf life and the food safety, but also by helping them to increase their incomes from sales through value addition.





Practical training on post-harvest and quality control for fish vendors and fish traders.

Written Communication

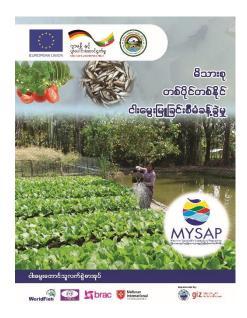
The inland component of MYSAP has produced a whole range of written communication materials including leaflets, booklets, letters, emails, blogs, success story articles, Training of Trainer (TOT) manuals, training video clips with sub-titles, reports, flip charts, PowerPoint presentations, etc.

The design of each written communication produced and the balance between written text and illustrations, and the language used was determined by the educational level of the likely key target audience, their ability to read and write and to what level, and their preferred first language.

The inland component of MYSAP, after MYSAP approval, has widely shared its information, education and communication materials as widely as possible to maximize the impacts of extension and training materials produced and lessons learned both positive and negative by the dissemination of hard copies of extension and training materials like leaflets, posters, reports, training manuals, etc., and the dissemination soft copies of materials through:

- 1) The Green Way mobile phone application;
- 2) The Myanmar Information Management Unit (MIMU);
- 3) The Fisheries Information Centre (FIC);
- 4) YouTube;
- 5) Facebook; and,
- 6) The Monitoring, Evaluation and Learning (MEL) platform of CGIAR.

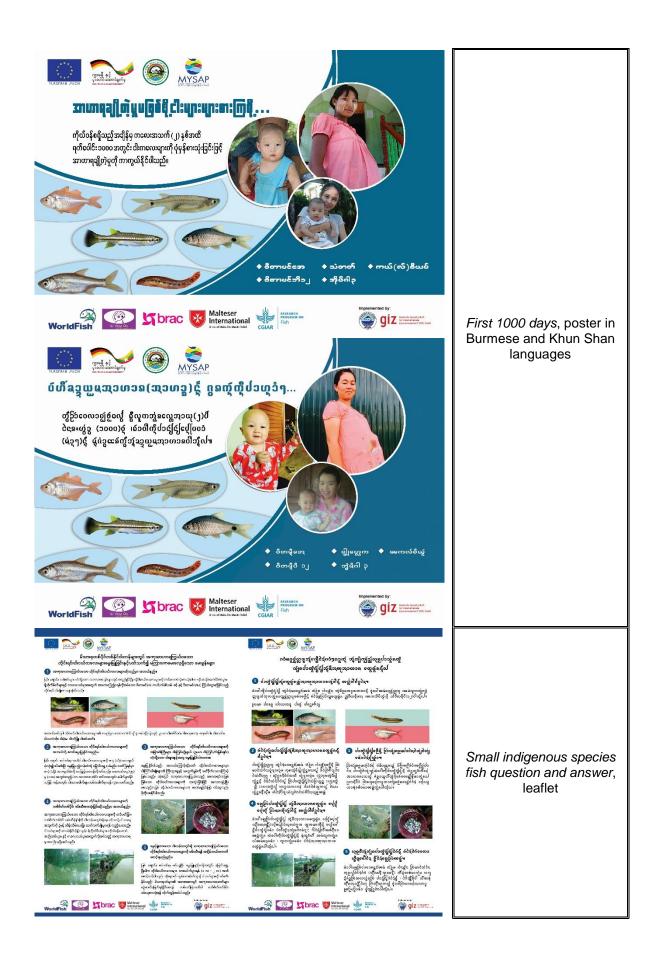
The following are selected examples of written communication materials delivered by the inland component of MYSAP:



Small-scale aquaculture guide, booklet









Partial harvesting of small indigenous fish species using a floating gill net, leaflet



Rice-fish culture leaflet



Small-scale aquaculture and integrated vegetable production and improved human nutrition, booklet

Visual Communication

The inland component of MYSAP has used visual communication to reinforce key messages for literate people and to help people who cannot read to understand key messages. Visual communication has included the use of photographs, art drawings, sketches, charts, and graphs to convey the information to the target audience including scientists, policy makers and direct beneficiary household members from young to aged. Visual communication was used to reinforce key take-home messages and learning points, and provided additional ideas and information for the target audience to consider.

As the situation on the ground has changed in Myanmar during the 14 months of the COVID-19 pandemic, and the 4 months of the state of emergency, the civil disobedience movement, and protests, and restrictions on internet services, the inland component of MYSAP was flexible and transitioned from delivering extension and training services primarily through largely face to face meetings and visits to the increased use of virtual platforms and a private member only Virtual Fish Culture Learning Group (VFCLG) on Facebook.

Following the outbreak and spread of COVID-19 in Myanmar in mid-March 2020, the inland component of MYSAP adopted virtual platforms and the VFCLG for distance learning. The staff of the three collaborating NGO have efficiently used their time when they were unable to go into the field to conduct face to face training and extension meetings, to produce short training video clips on their mobile phone on key small-scale aquaculture and improved human nutrition promotion training topics included in the three modules, and 27 training sessions in TOT manual developed by the inland component of MYSAP.

Direct beneficiary household members reported that after downloading a video clip from the VFCLG, in their preferred language, selecting from Myanmar, Big Shan, Arka and Lahu, they could then repeatedly watch each video clip, pause as convenient, and if necessary stop the training video, rewind it and watch it again if there was anything that do not understand or catch the first time. They also liked being able to share the video clips with neighbours and friends who were not MYSAP direct beneficiary households.

To the end of the inland component of MYSAP implementation period a total of 77 small-scale aquaculture and human nutrition training video clips (17 in Myanmar language, 25 in Big Shan language, 20 in Lahu language and 15 in Arkar language) were produced by the NGO and WorldFish staff working on the inland component of MYSAP. At the time of going to print, Greenovator had committed to upload all 77 training videos onto the Green Way mobile phone application by the end of July 2021.

Below are some examples of MYSAP funded visual communication materials used for inland component activities:





In lessons learned workshops, video clips and graphs of production results were shared that showed MYSAP farmer successes, and MYSAP funded extension leaflets were disseminated.





At the field level, the community facilitators utilized variety types of materials, including flash cards sets with laminated photographs used during training of participants to make the training sessions more interactive, motivational and more easily understood.

List of the visual materials:

- pH paper for observing water quality in the pond,
- Small-scale aquaculture (SSA) flash cards for clear understanding on pond embankment repair, removing mud from pond beds, aquatic weed eradication, removing carnivores and non-cultured fish before fish seed stocking, etc.,
- Use of a cast net for monthly sampling of fish in grow-out ponds,
- Human nutritional flash cards for sharing knowledge and information on food groups, and
- Poster and brochures of nursing and farming fish and nutrition promotion.

Conclusions

MYSAP used a wide variety of communication approaches to meet the diverse contexts and backgrounds of the poor and vulnerable direct beneficiary households with which it worked under its inland component. At the same time as having a diverse target audience, MYSAP and the NGO staff had to respond flexibly and rapidly to a fast changing situation on the ground with the COVID-19 pandemic and restrictions imposed on face to face meetings, group sizes allowed and also travel restrictions. Despite the above, the inland component of MYSAP demonstrated that with the increased use of virtual media, it was still not only possible to effectively communicate, but that the use of a variety of communication approaches also provided some synergies and benefits which will hopefully have sustainable long-term impacts for the direct beneficiary households with which MYSAP collaborated.