



# Developing a New Science Curriculum in Myanmar

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Presented by Dr. Ni Ni Than

Chairperson of Science Subject Curriculum Committee

Professor, Chemistry Department, University of Yangon,  
Myanmar

# Background History

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- Over a period of three-and-a-half years the MOE has undertaken a Comprehensive Education Sector Review (CESR) (Phase 1: Rapid Assessment, Phase 2: In-depth Analysis, Phase 3: Development of Education Sector Plan) to assess the strengths and weaknesses of the national education system and develop an evidence-based National Education Strategic Plan (NESP) for the period 2016-2021.
- The CESR initiative was supported by Education Working Groups (EWG) that were established to undertake an in-depth policy review and make recommendations for drafting the National Education Law and linked sub-sector laws.
- A major achievement -National Education Law (NEL) (2014) and the NEL Amendment (2015) by Parliament to strengthen the quality, effectiveness and efficiency of the national education system
- These two new laws provide an excellent national framework to enable implementation of a wide range of inter linked and complementary reforms across the national education system, such as: recognition of the right of all citizens to free, compulsory education at the primary level; establishment of a standards-based education quality assurance system; expansion of the basic education system to 13 years; support for the learning of ethnic languages and culture; greater decentralization within the education system; and a recognition of the right of parents and community members in school management

Source: MOE. ( 2016). *National Education Strategic Plan 2016-21 (Summary)*, Nay Pyi Taw.

# Implementation Process

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- **Current Education System: G1 to G11**  
(5+4+2)
- **New Education System: KG + 12**  
(5+4+3)
- **in 2016-17 Academic Year: New KG**  
**was implemented.**

Academic Year	KG	Primary	Lower Secondary	Upper Secondary
2015/2016	x	x	x	x
2016/2017	KG	x	x	x
2017/2018		G 1	x	x
2018/2019		G 2	x	x
2019/2020		G 3	G 6	x
2020/2021		G 4	G 7	G 10
2021/2022		G 5	G 8	G 11
2022/2023			G 9	G 12



# Developing Grade One Primary Science

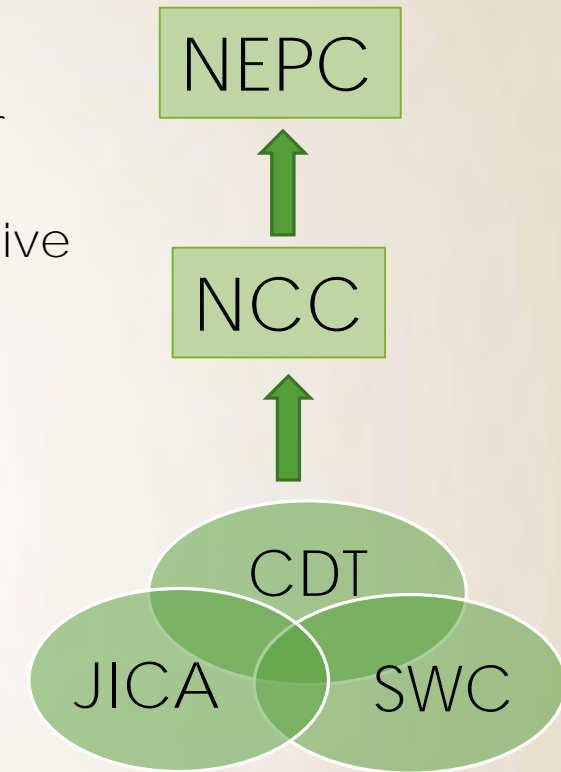
According to the guidelines, Science textbook development processes are carried out

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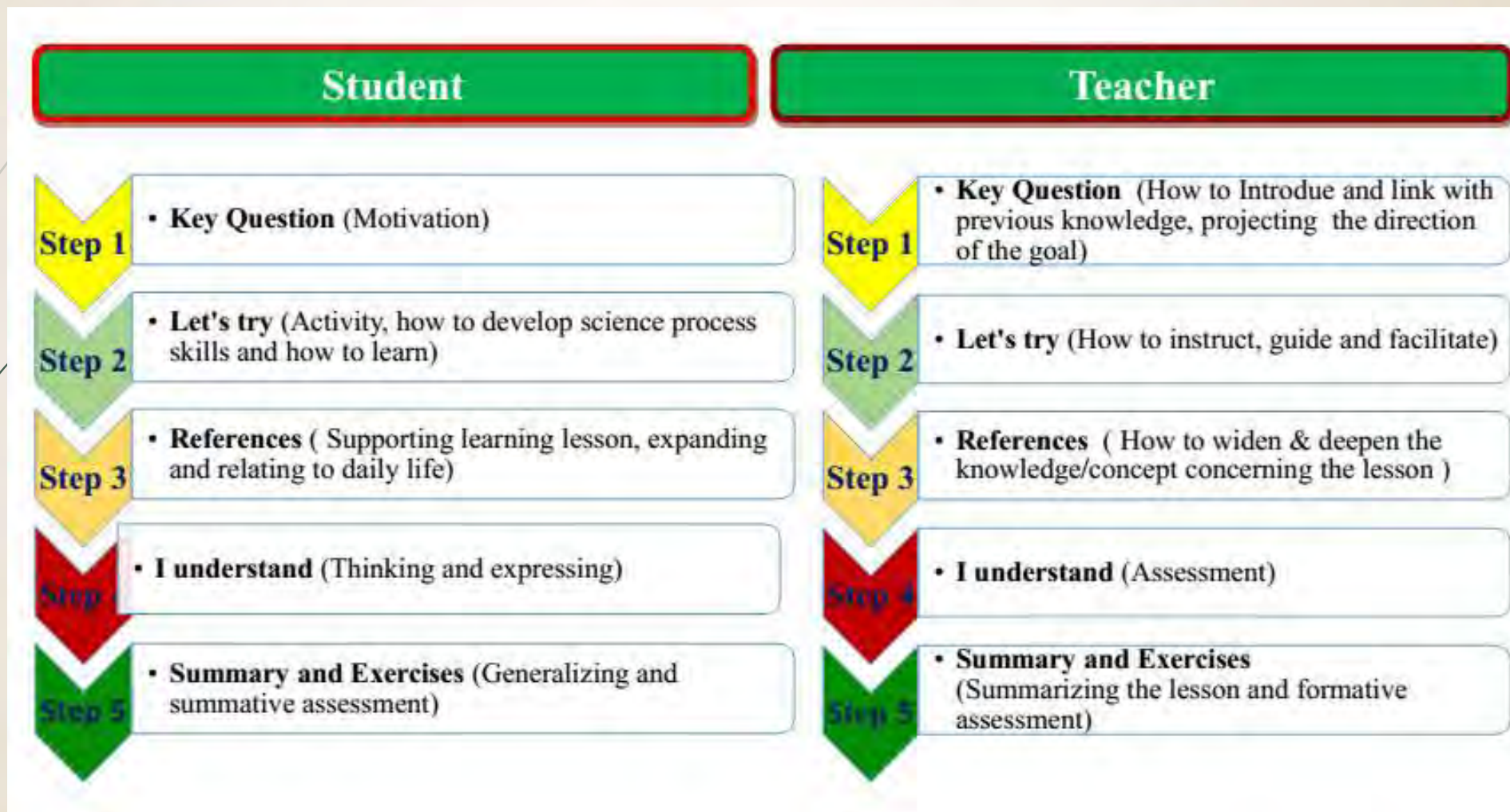
The aim of the Myanmar primary science curriculum is to provide students with **practical experiences** based on **exploration of the environment** so that they become familiar with and develop affection for it and also **to develop their scientific inquiry skills** to gain scientific knowledge and positive attitudes towards science.

## Strands(Areas) in Primary Science

- In primary level, there are two phases;
  - G 1 and G 2 (Introduction with Environment)
  - G 3, G 4 and G 5 (Basic Science)
- Grade One & Grade Two
  - Part (1) Living things & Environment
  - Part (2) Earth & Space
- Grade Three, Grade Four & Grade Five
  - Part (1) Living Things      Part (2) Matter
  - Part (3) Energy              Part (4) Earth & Space
  - Part (5) Environment



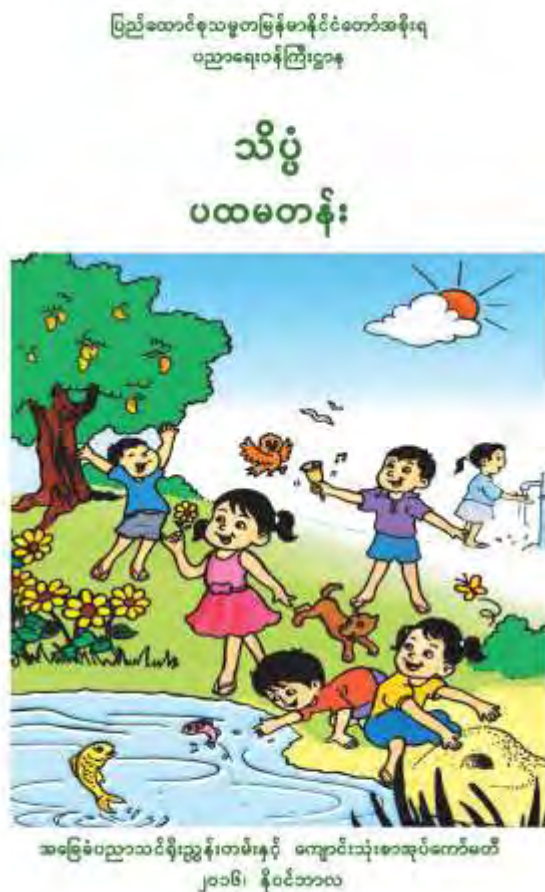
# Myanmar Primary Science Textbook Design





# Grade One Science Textbook

Textbook  
Cover



Starting Key  
Question of  
every lesson

## Lesson Objective

## Learning Outcomes

# Teaching Learning Process starts

## Key Question

## Small Textbook inserting

## Activity (1)

## Important Points



## Key Challenges in Developing New Science Curriculum

- To upgrade the professional capacity of Curriculum Development Teams
- To upgrade teachers quality for the successful implementation of new science curriculum
- To take into consideration the class size, the teaching aids available, **teachers' quality etc.**

Thank you for your attentions





Implemented by

**giz**

International  
Cooperation  
GmbH



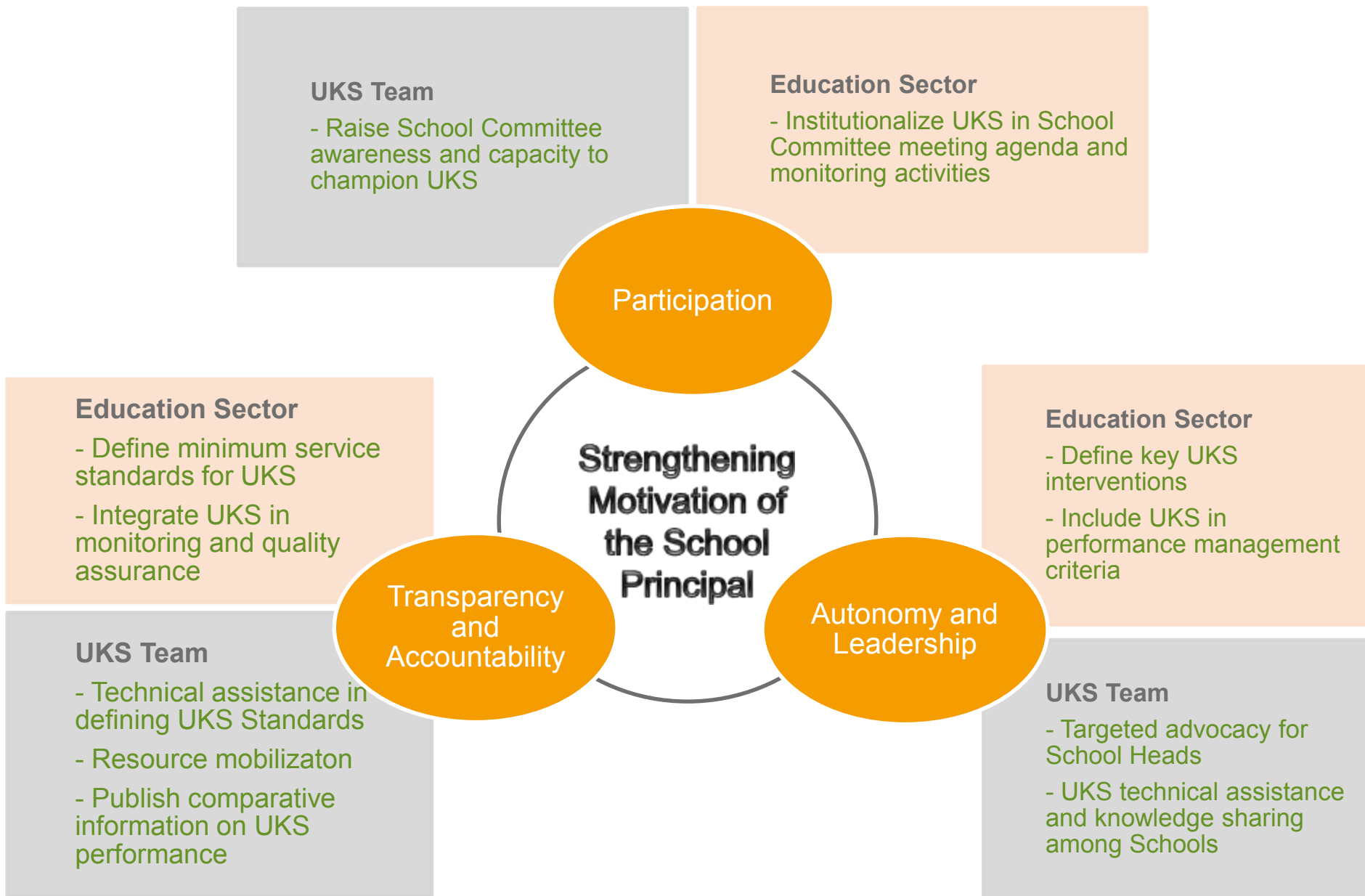
PILOT

# Strengthening Accountability for WASH in Schools through Online Transparency Platforms

**FIT FOR  
SCHOOL**

# WASH in Schools in Bandung City: Key Issues

- City Education Department cannot efficiently exercise its quality assurance function without a M&E system for WASH in Schools
- The current incentive to implement WASH is the Healthy School Competition, which mainly benefits top performing schools. There are no incentives for non-competing schools to reach minimum standards.
- Problems exist at the school level concerning logistics and time management. These are seen as having negative impact on other school processes.
- Without communicating importance of WASH in achieving education sector goals, the high autonomy of school principals even seems to be a barrier.
  - What systems and structures can we influence to motivate school principals to implement the program?





# In Indonesia Community Participation and Accountability of Schools is low

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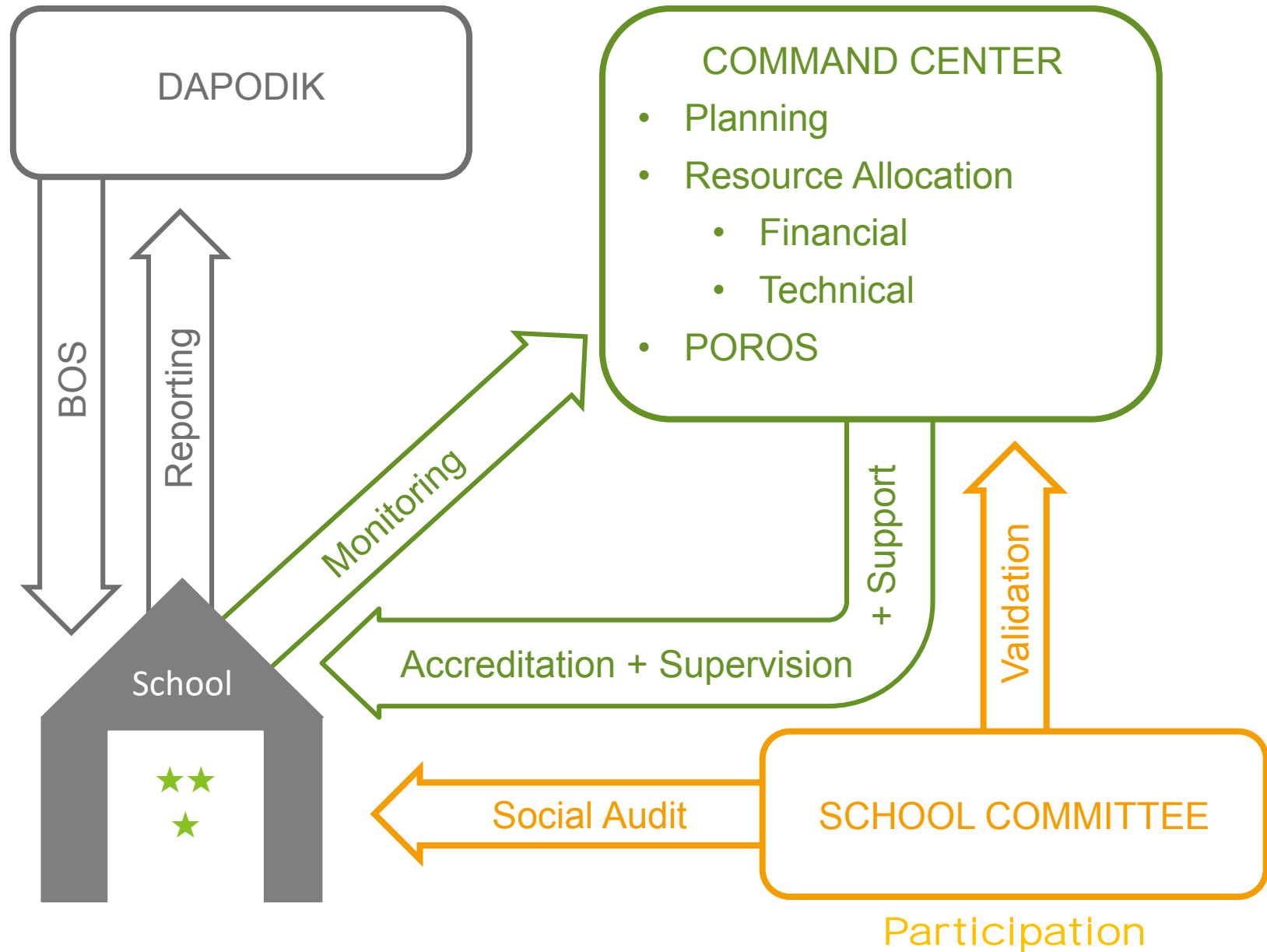
- School Committees' and parents' participation and influence on schools' decisions is low, because of
  - inadequate information flow to parents
  - low parental awareness of holding schools *accountable*
- the existing accountability arrangement [...] puts more emphasis on top-down supervision and monitoring.

*Worldbank study of SBM in Indonesia (2014)*

- Similar results were obtained in studies by *DFAT* (2014), *Dandan* (2011), and *ACDP* (2013)

Autonomy

Transparency & Accountability





## AKTIVITAS TERKINI



## Tweets by @BdgUks



**UKS Bandung Juara** @BdgUks

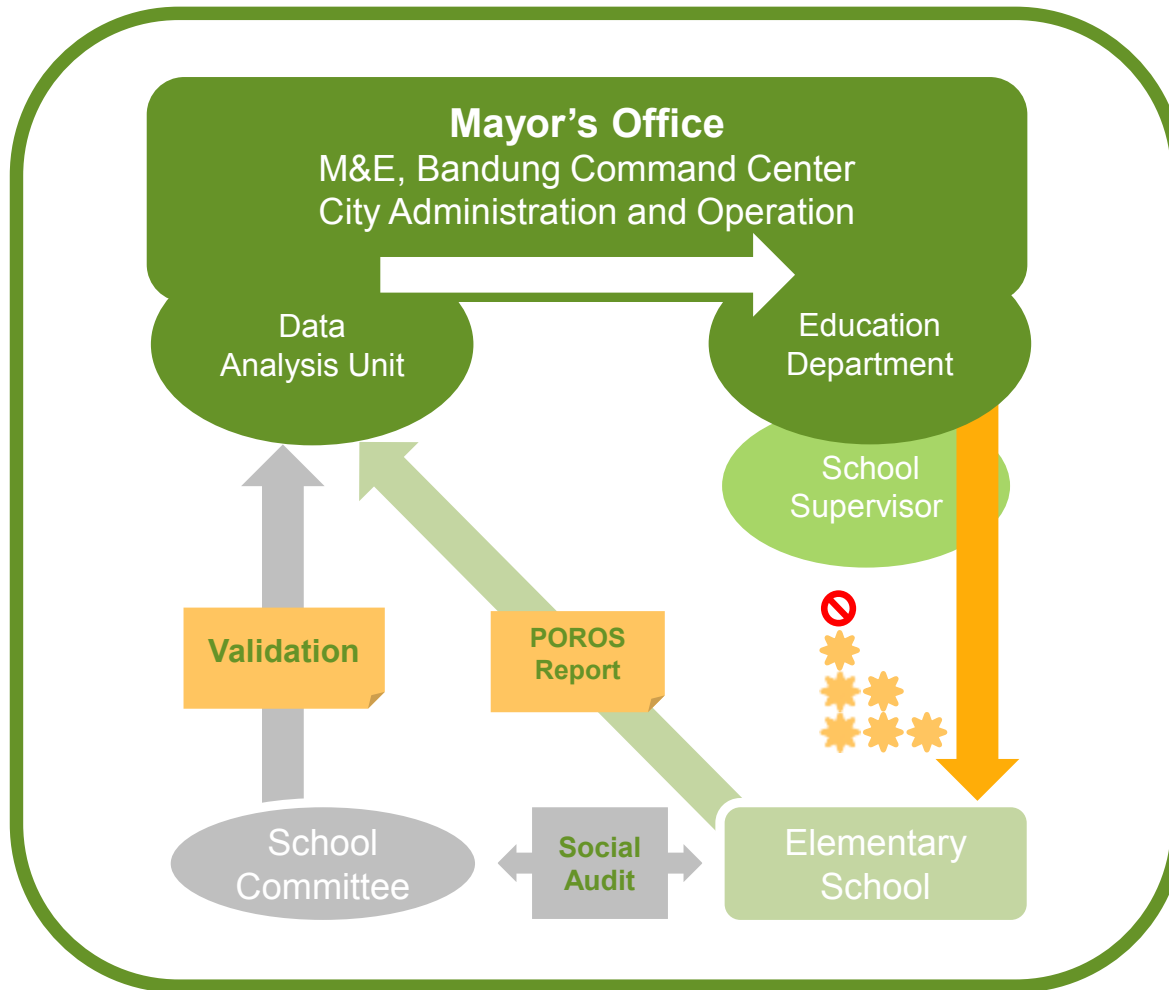
Giat UKS juara @Bandung\_Dinkes @BdgKesra @disdik\_bandung



	WASH TERBAIK
	lihat semua
	<b>SD NEGERI KARANGPAWULANG 1</b>  Belum Terverifikasi Jl. Karawitan No. 81
	<b>SDPN SABANG</b>  Belum Terverifikasi Jl. Sabang No. 2
	<b>SD MUHAMMADIYAH 7</b>  Belum Terverifikasi Jl. Kadipaten Raya No 4-6
	<b>SD YWKA REL HOMOY SCHOOL</b>  Belum Terverifikasi Jl. Rajawali I No. 5
	<b>SD MUTIARA BUNDA</b> 



# POROS Reporting Cycle



# Community Awareness & Participation for Accountable School Management of WinS

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## Benefits

- ✓ Parents are better informed and demand high quality of WinS; schools prioritize WinS
- ✓ Closer cooperation between communities and schools
- ✓ Communities appreciate empowerment by social accountability

## Challenges

- Need to assess the implications of non-linear accountability flows
- Establishing safeguards against mob rule
- How open are governments to community empowerment?

# Forest Ecosystem Services for Local Human Health in Northern Mountain Areas in Vietnam

Dr. Nguyen, Thi Phuong Mai

Faculty of Environment and Earth Sciences

Thai Nguyen University of Sciences

Email: [maintp@tnus.edu.vn](mailto:maintp@tnus.edu.vn)



# Forest Ecosystem Services and Human Health



**Forests**  
(biodiversity and  
processes)



**Forest Ecosystem  
Services**  
(e.g. food, medicine)



**Human benefits**  
(e.g. physical and  
mental well-being)

**Food**



Nutritional benefits

**Clean water, fresh air**



Risk reduction of  
disease and illness

**Medicinal plants**



- Health improvement
- Disease treatment

**Spiritual, cultural and  
recreational services**



Mental health  
contribution

# Research area

- ✓ **Study site:** Vo Nhai district, Thai Nguyen province, Northern Vietnam

Forestry land accounts over 80% of total mass land



- ✓ **Local people:** are minority ethnics

Their traditional healthcare knowledge based on species in the local forests

More than 50% population use medicinal plants



The Tay



The Dao

# Medicinal plants

- The local forests contain **574 spices** of medicinal plants (52.8% of plant species)
- List of flora familia (having at least five medicinal species): **157 species, 89 genus**

Nb.	Familia		Species	Genus
	Scientific name	Vietnamese name		
1	Euphorbiaceae	Thầu dầu	23	11
2	Rubiaceae	Cà phê	17	8
3	Myrsinaceae	Đơn nem	15	2
4	Zingiberaceae	Gừng	13	4
5	Araliaceae	Ngũ gia bì	12	8
6	Asteraceae	Cúc	11	11
7	Acanthaceae	Ô rô	10	9
8	Araceae	Họ Ráy	8	6

Nb.	Familia		Species	Genus
	Scientific name	Vietnamese name		
9	Malvaceae	Bông	7	5
10	Verbenaceae	Cỏ roi ngựa	7	2
11	Smilacaceae	Cật cang	7	1
12	Apocynaceae	Trúc đào	6	5
13	Rosaceae	Hoa hồng	6	2
14	Cucurbitaceae	Bầu bí	5	5
15	Fabaceae	Đậu	5	5
16	Lamiaceae	Họ Hoa môi	5	5

# Local Knowledge on Healthcare

## ➤ Chemical properties of plants

- Tonic → Improve general health
- Treat disease
- Toxic → use for hunting, pesticide producing

## ➤ Improve physical health

- Health compensation after illness
- Women in postnatal period
- Detoxification

## ➤ Disease treatment

- Internal organ-related diseases: food and drinking
- Skin: washing, bathing or soaking affected parts in liquid of boiled or decanted herbs
- Cuts and wounds: apply freshly crushed/chewed/heated leaves
- Backaches or body-aches: to drink medicinal infusion or poultice a layer of crushed and heated herbs



Wild ananas  
(*Pandanus Tectorius Soland*)



*Knema Cortiosa Iour*



# Local Knowledge on Healthcare

## ➤ Collecting

- Part of plants: leaves, roots, fruits, nuts, barks, flowers
- Time: early morning and late afternoon
- Frequency: seasonal or regularly depends on species

## ➤ Processing:

- Fresh or dry (by sun or heat)
- Method: Stew; boiling; heating on fire; soaking in wine; Mixing with alcohols, water of rice-wash or clear limewater

## ➤ Using:

- Eating
- Drinking
- Bathing
- Soaking
- Poultice



Collecting medicinal plants



Sun-dried medicine

# Impac Factors

Factor	Description	Impact level
Forest degradation	- Reduce number of species and quantity in a species	-
Outside market	- Overexploitation some given species - Grow some medicinal species as trading products	- /+
Method of knowledge preservation	- Non written documents → losing some remedies - Genders in knowledge transference	-
National healthcare system	- Alternative the traditional medicine in some cases - Expand the knowledge in medicinal plant use	-/+



# Forest Ecosystem Services for Local Human Health in Northern Mountain Areas in Vietnam

## Future research

Improve local livelihood based on forest ecosystem services of medicinal plants and local knowledge of traditional medicine

**Thank you for your attention!**

### Contact:

Dr. Nguyen, Thi Phuong Mai

Email: [maintp@tnus.edu.vn](mailto:maintp@tnus.edu.vn)



**USAID**  
FROM THE AMERICAN PEOPLE



**MARIE STOPES**  
**CAMBODIA**  
Children by choice, not chance



**Evidence**

# Regional Alumni Meeting

“ Environment and Health. Challenges and Prospects for South-East Asia’

## Improving access to quality health services

Lan Mao  
Head of WorkerHealth  
May 27, 2017 | Hanio, Vietnam



# Cambodia at Glance

- **Population:** 15.957million
- **Capital:** Phnom Penh, 1.731 million
- **Population aged between 15-24 Years – 22%**
- **Contraceptive prevalence rate:** 39% nationally - 29% in Phnom Penh
- **Mothers mean age at first birth:** 22.9 years
- **Urban population:** 20.7%
- **Health expenditure:** 5.7% of GDP



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# Garment Factory Situation in Cambodia

- The garment industry contributes more than 80% of national export revenue
- It employs over 700,000 workers, of which approximately 85% are female.
- 80% of these women are under the age of 30
- Minimum wage: \$153
- 80% of female workers are not using modern methods of family planning
- Female workers are often reported as having poor health conditions.



# Objective



To increase access to **high quality reproductive health and voluntary family planning** counseling and services for **garment factory workers**

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# WorkerHealth Service Delivery Model



Tailored call-to-action messages



WorkerHealth Champions



Strengthening garment factory infirmaries



GIS equipped, client referral system and app



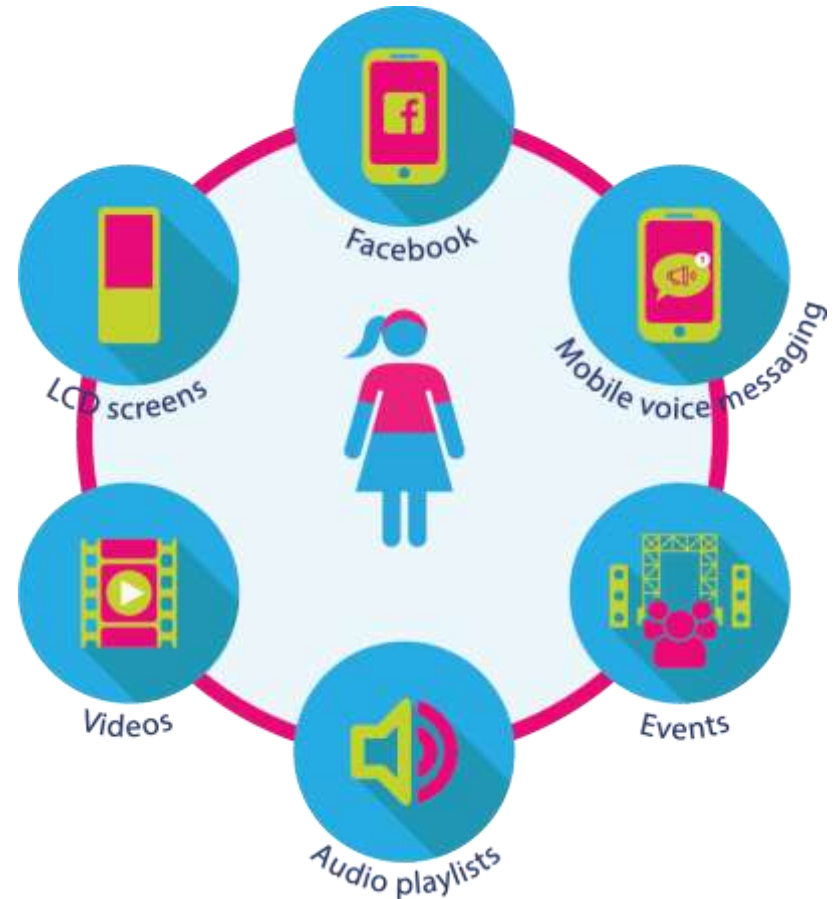
Quality Assured Network of family planning providers





## Call to Action

- **WorkerHealth** creates a platform for garment factory workers to accomplish their personal goals
- **Call-to-action messages** tailored to worker needs and aspirations are dispersed across complimentary channels inside garment factories and within workers' communities





# WorkerHealth Champions



- Promote WH call-to-action (CTA) messages among GFWs
- Encourage co-workers to like WH Facebook page
- Refer co-workers to Quality Assured Network of FP providers



## Garment factory infirmary

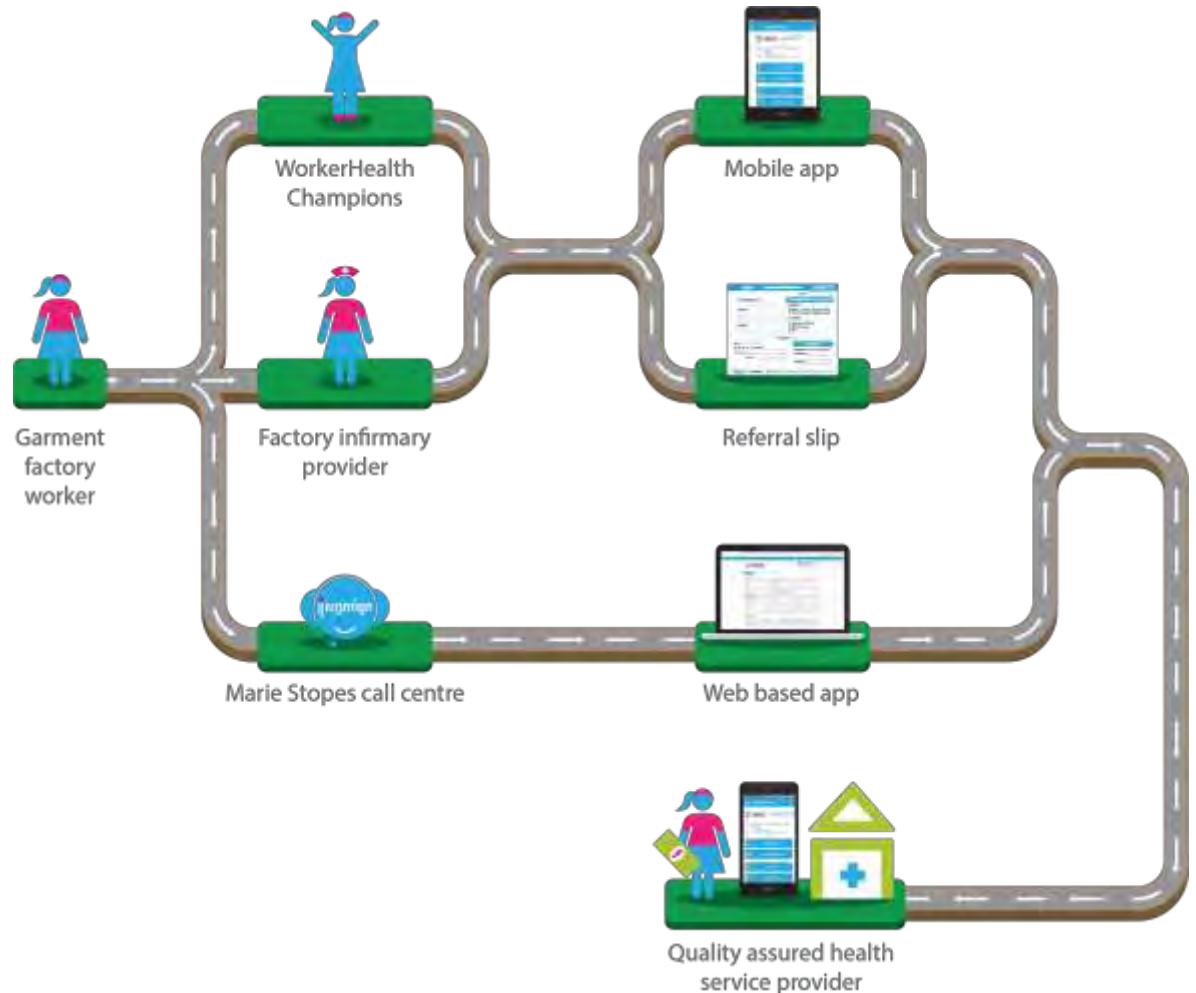
- Source of information & services
- Strengthening capacity of infirmary providers
- IEC Materials
- Refer workers to Quality Assured Network providers
- Monthly quality assurance





# Client referral system and app

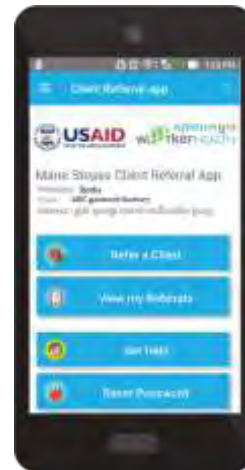
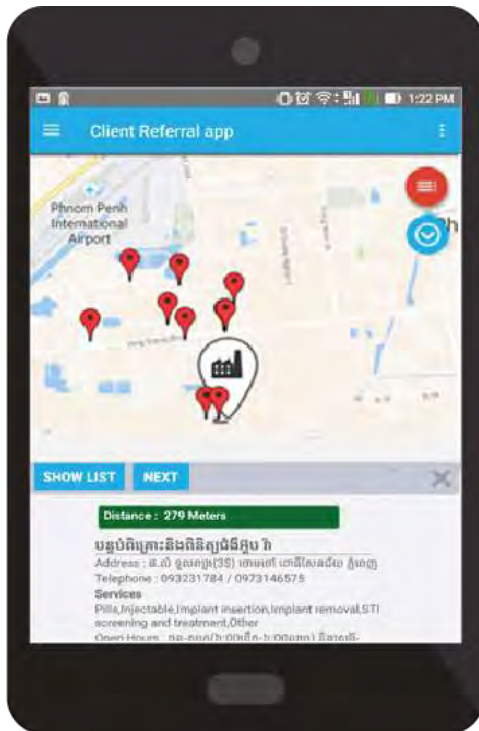
- Marie Stopes has pioneered a GIS equipped SMS referral system
- Workers can access quality assured voluntary FP counseling and services at providers of their choice







## Client referral system and app (cont)



Used by

- Garment factory infirmery providers,
- WorkerHealth Champions, and
- Marie Stopes Call Centre

Innovative approach will allow for real time monitoring and evaluation



# Quality Assured Network

- Maries Stopes established a Quality Assured Network of providers close to selected garment factories and worker residences
- Provide greater choice for workers in accessing voluntary family planning information, counseling and services.



# THANK YOU!



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