

# Health improvement strategy using nutrition fortified rice in Cambodia

February 7<sup>th</sup>, 2018

NJPPP

# Overall business goal and expected benefit

## \* Objectives

- ✓ Nutrition Fortified Rice in Cambodia
- ✓ Introduce nutrition fortified rice and nutrition education into workplace lunch.
- ✓ Nutrition Improvement for women of reproductive age

## \* Expected benefit

- ✓ Reduction of absenteeism
- ✓ Increasing work efficiency

# Purposes and aims in field survey

## \* Purpose

- ✓ To investigate the possibility of the project and collaboration through exchange of opinions with factory managers, local government, international organization and Academia

## \* Aims

- ✓ **Factory manager**: recruitment of factory as a project site
- ✓ **Local government**: collection of policy information on nutrition, nutrition fortified food and work environment
- ✓ **International Organization • NGO • Academics**: collection of information on existing business and considering of the possibility of collaboration

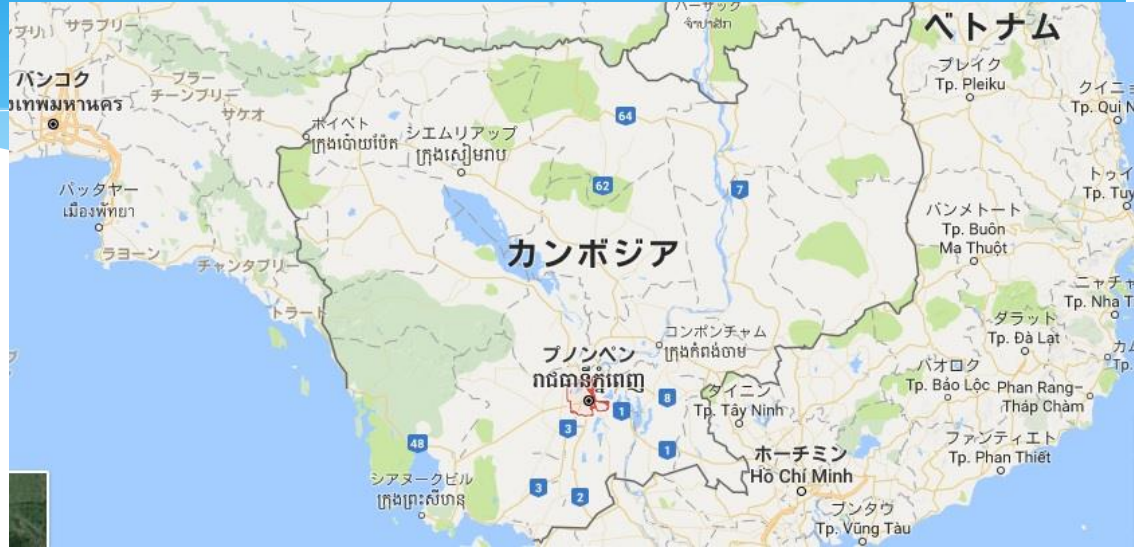
# Visiting schedule and place

## Schedule

Phnom Penh  
(September 4<sup>th</sup> to 8<sup>th</sup>)

## Place

- Factory manager
  - ✓ PPSEZ
  - ✓ Ajinomoto Cambodia
  - ✓ Rohto Mentholatum
- Local government
  - ✓ Council of Agricultural Rural Development
  - ✓ Ministry of Health, National Nutrition Project
  - ✓ Ministry of Labour and Vocational Training
  - ✓ National Sub-Committee for Food Fortification
- International Organization
  - ✓ UNICEF
  - ✓ WFP
  - ✓ JICA Cambodia
- NGO
  - ✓ RACHA
  - ✓ FIDR
  - ✓ CJCC
- Academia
  - ✓ National Institute of Public Health



# Nutrition Issue in Cambodia

## \* Nutrition issue

- ✓ Micronutrient deficiency in Women of reproductive age
  - ✓ Iodine deficiency: 78.0%
  - ✓ Zinc deficiency: 62.8%
  - ✓ Folic acid deficiency: 19.2%
  - ✓ Vitamin A deficiency: 3.2%
  - ✓ Iron deficiency: 2.6%
  - ✓ Vitamin B1 deficiency: 27.0%

## \* Health impact

- ✓ Maternal and child health (premature birth, premature baby)
- ✓ Reduction of physical strength and operating efficiency

## \* Cause

- Insufficient nutrient supply from food
- Low food variety

# Exchange of information with Cambodian government

## \* Nutrition policy

- ✓ National Strategy for Food Security and Nutrition 2014-2018 (Council of Agricultural Rural Development)
- ✓ Objective 2: Utilization of their food resulting in reduced child and maternal malnutrition
- ✓ Concrete policy: nutrition fortified food(ex: Rice)

## \* National Sub-Committee for Food Fortification

- ✓ Ministry of planning as the chairman of the committee coordinates views with related ministries
  - ✓ Iodized salt
  - ✓ Iron fortified fish sauce and soy sauce

## \* Public Private Partnership

- ✓ Due to unexplored area in Cambodia, Cambodia hopes to introduce the Japanese PPP project as a model

# Company and occupational health in Cambodia

## \* **Company**

- ✓ Many of foreign companies in Cambodia are Japanese or Chinese

## \* **Occupational health**

- ✓ There have been reports in which women worker dropped during job
- ✓ Inappropriate eating behavior of working women in garment manufacturing (short lunch breaks, consumption of confectionery )



# Company and providing food service in Cambodia

## \* **Food service**

- ✓ Many Japanese companies provide food services (only cooking rice or with side-dish )
- ✓ Many of domestic and Chinese companies provide no food services
- ✓ Some workers may find job on condition of providing food service
- ✓ Some workers may hope to receive cash instead of food service (for sending money home)



# Exchange information with International organization • NGO • Academia

- \* **WFP Cambodia provides nutrition fortified rice as a school lunch**
  - ✓ Potential for information sharing and cooperation in final process (Blending with regular rice) of nutrition fortified rice production and domestic transportation
  - ✓ Potential for cooperation in government policy support in Cambodia
- \* **UNICEF Cambodia**
  - ✓ Potential for cooperation in effect test of nutrition fortified rice

# Exchange of information with NGO and academia

- \* **Academia in Cambodia**

- ✓ Possible collaboration with National Institute of Public Health

- \* **NGO**

- ✓ Collaboration with Reproductive and Child Health Alliance (RACHA)

- \* **Food Intake Survey**

- ✓ No Food Composition Table in Cambodia
- ✓ There is possibility to use the composition table derived from neighboring country, however the application is concerned due to no description of number and low reliability

# Exchange information with factory managers

- \* Two Japanese-affiliated companies (Seasoning manufacturer/Pharmaceutical & cosmetic packaging)
- \* Number of worker: 110 person/20 person
- \* Women worker: 40 person/14 person
- \* Work schedule: two-shift work program/Day shift
- \* Break (Lunch) time: One hour/45 minutes
- \* No health check
- \* Factory meal utilization rate: 100%

# Serving dishes at factory [service provision]

- \* Provide meals cooked at factory kitchen
  - ✓ Receive at facing counter (choose from side dishes)
  - ✓ Catering (one menu)



# Serving dishes at factory 【cost】

- Cost of worker
  - ✓ Cooked rice is free, side dishes are charged (<0.40USD)  
(some workers bring their side dishes from home)
  - ✓ Both cooked rice and side dishes are free
- Expense per serving covered by factory
  - ✓ Cooked rice: <0.20USD
  - ✓ Cooked rice + side dishes: 1~1.5USD





# Serving dishes at factory 【Nutrition management】



- ✓ Outsourcing firm or personal plan menus and cook
- ✓ Not yet introduced Nutrient management

# Future challenges

- \* Factory recruits which cooperate as a project site
  - ✓ Profile of cooperating factory
    - ✓ More than 200 reproductive age women workers
    - ✓ Provide meals
  - ✓ Recruiting method
    - ✓ Through Japanese company network
    - ✓ Through network of Garment Manufacturers Association in Cambodia (GMAC)
  
- \* Gathering information on meal at the workplace and policies on occupational health
  
- \* Cost estimation of nutrition fortified rice