

Thailand's progress in meeting food and nutrition security goals

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**A Keynote address at the South-South Learning Workshop to
accelerate progress to end hunger and undernutrition.
Bangkok, 20 June 2017**

Presentation Outline

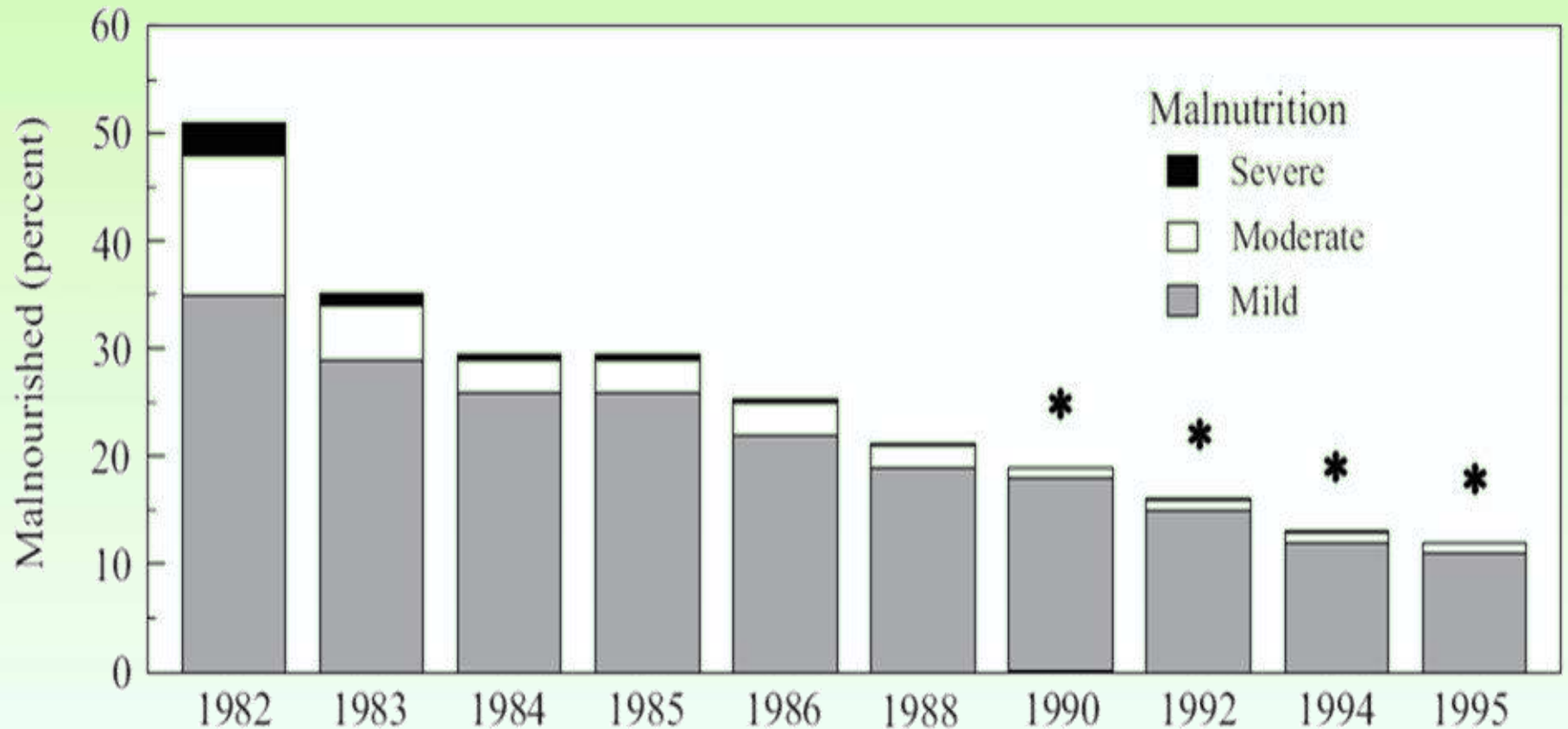
- Introduction
- Policy and strategy for alleviation of under-nutrition
- Current nutrition challenges:
strategic plan and actions
- Conclusion

Thailand: Current situation



- Population of 68.3 m.
- Success in reduced maternal and child malnutrition since the eighty under the Poverty Alleviation Plan (PAP)
- Currently facing with double burden of malnutrition (DBM), a coexistence of under and over nutrition, and related non-communicable diseases (NCDs)
- Thailand has been a major food exporter

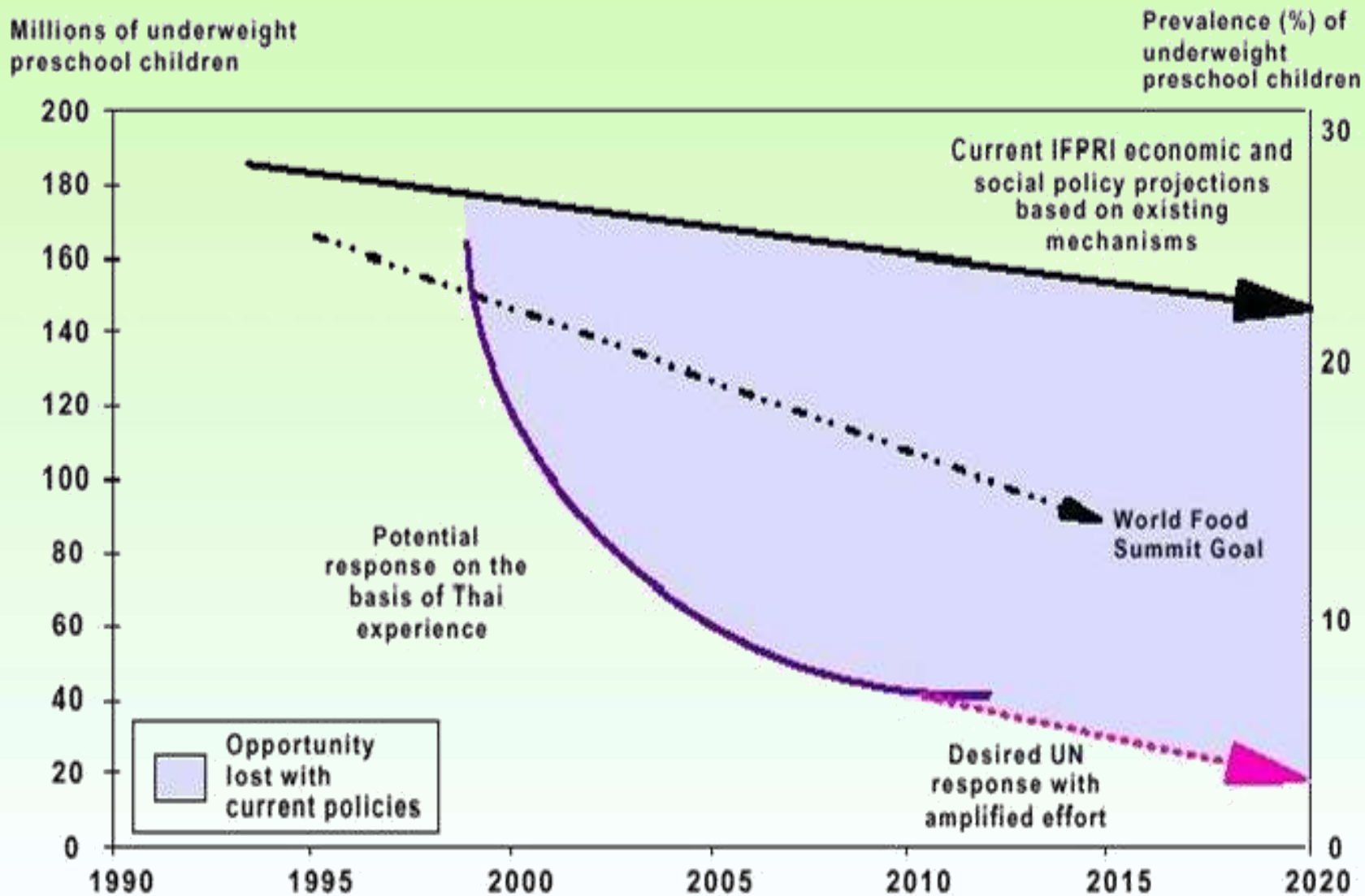
Trends in preschool child malnutrition (Wt/Age) in Thailand



Note: * Very low prevalence and is included in moderate PEM.

Source: ACC/SCN (1999).

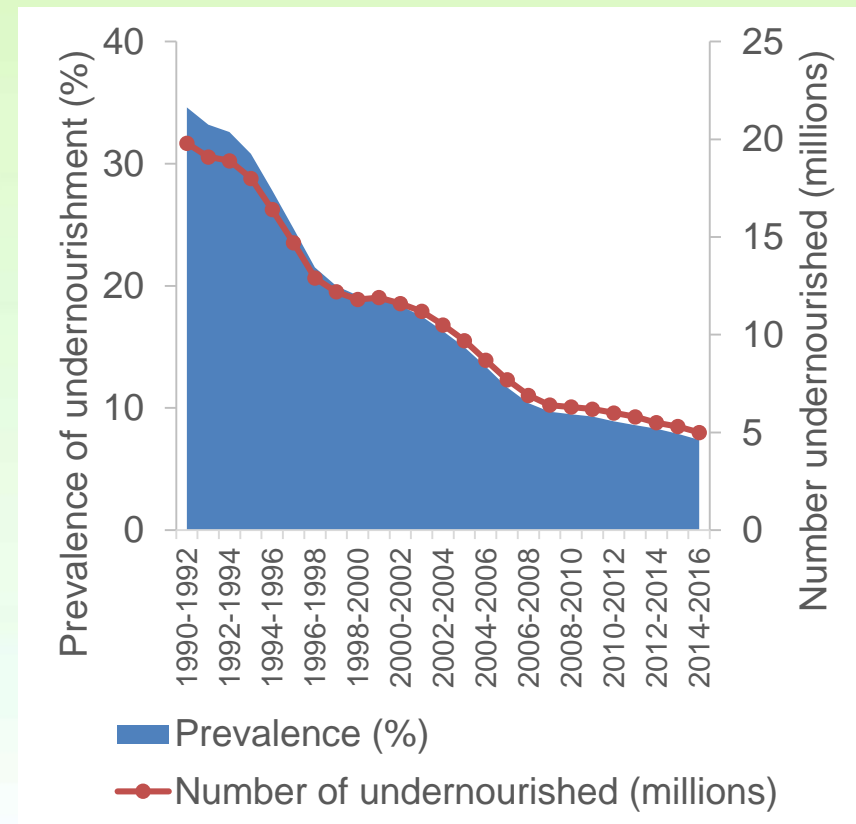
Elimination of undernutrition: a global deficit and priorities*



Great progress in reducing hunger in Thailand*

- Hunger fell from 35% to 7% (1990-2015) or reduced by 79%
- Number of hungry people fell from 20 to 5 million in same period or reduced by 75%
- Thailand has achieved MDGs

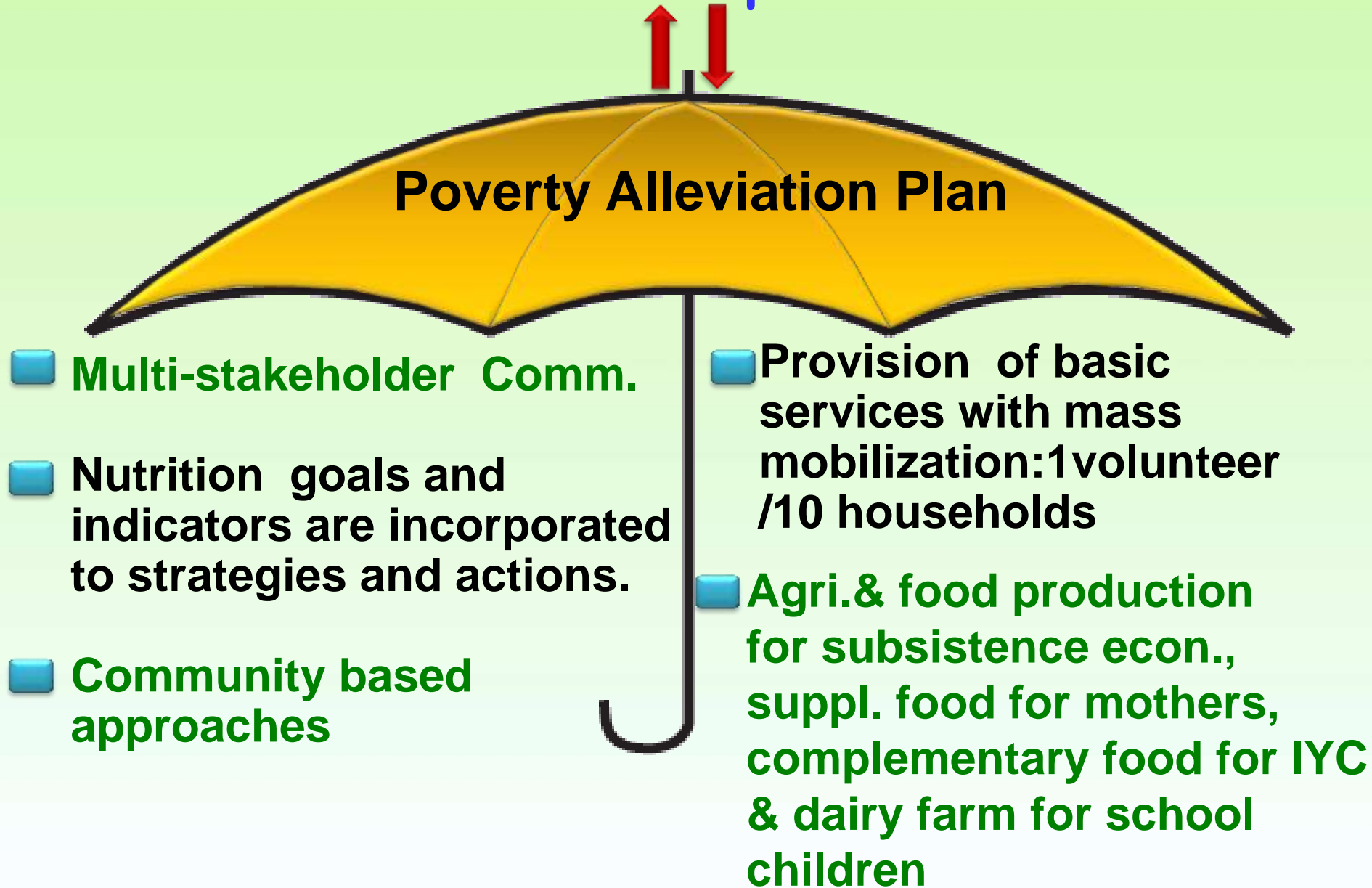
Undernourishment in Thailand



Food and nutrition security*

“**Food and nutrition security** exist when all people at all times have **physical, social and economic access to food**, which is safe and consumed in sufficient quantity and quality to meet their **dietary needs** and **food preferences**, and is supported by an **environment of adequate sanitation, health services and care**, allowing for a healthy and active life.”

National Rural Development Committee



- Agriculture/
• Food supply/
• Service

Food

Nutrition

Health

- Promotion
• Protection
• Treatment

**Nutrition is a link between food and health,
regarding the fulfillment of energy, protein and micronutrient
requirements and non-nutrients from food in human life
course**

Ultimate Goals

Good Nutrition & Well-being for All

Main causes of maternal & child malnutrition

- Poor maternal nutrition and health leading to LBW of newborn, low milk quality and quantity
- **Declining of breast feeding practices**
- In adequate and in appropriate compl.feeding
- **Poor sanitation in IYC feeding and cares**
- Recurrent of illness i.e. diarrhea and respiratory tract infection
- **Undesirable eating habits**

Forging the Link Between *Government* and *Community*

Fostering interaction between the levels



Source: FAO

Community-Based Approaches

- Is an *integrated program* implemented at local level (district level and below)
- *National commitment* with sound nutrition improvement strategies and goals
- *Community actions*: basic services, mass mobilization, mutual efforts/actions to reach all people and to prevent malnutrition

Components of a successful community based program

Minimum Basic Services (Health, Education, Agr. Extension)

Menus (Activities)

- Antenatal Cares (ANC)
- Growth Monitoring and Promotion (GMP)
- Food production
- Food and nutrition education
- Food sanitation & safety
- School lunch and milk program since 1992
- Other activities

Supportive System

- Training
- Funding
- Problem Solving
- Supervision

Interface

(service providers and community leaders)

- Plan/goals
- Implementation
- Monitoring/evaluation

Community Leaders
Family
Individual

→ Facilitators

→ Mobilizers
(1:10 households)

Basic Minimum Needs Goals/Indicators

Menu Activity on ANC

- 4 ANC visits for all pregnant mothers
- High risk check up and treatment
- monitoring wt. gain
- Food, Nutrition and health education
- Food supplementation
- MTV, iron and folate supplementation
- Two tetanus toxoids
- Referral system and safe delivery service



Menu on Growth Monitoring and Promotion (GMP)

- Growth monitoring (wt.& ht.) and remedial actions
- Child growth education and cares
- Breastfeeding and complementary feeding
- Immunization
- Village based complementary food production for infants and young children
- Health and nutrition education
- Cooking and feeding demonstration
- Treatment of malnourished child
- Referral of severe illness and malnutrition



Menu on Nutrition in School

- Monitor weight and height regularly and take remedial actions based on growth monitoring
- Food services-school lunch and milk programs
- Food, personal and environmental hygiene
- Nutrition education
- Promotion of physical activity and exercise
- Positive school environment for healthy diets
- Plan to set up a “Nutri-teacher” post
- School gardens

Nutrition Situation

Thailand's Development Plans

Policies and Strategies

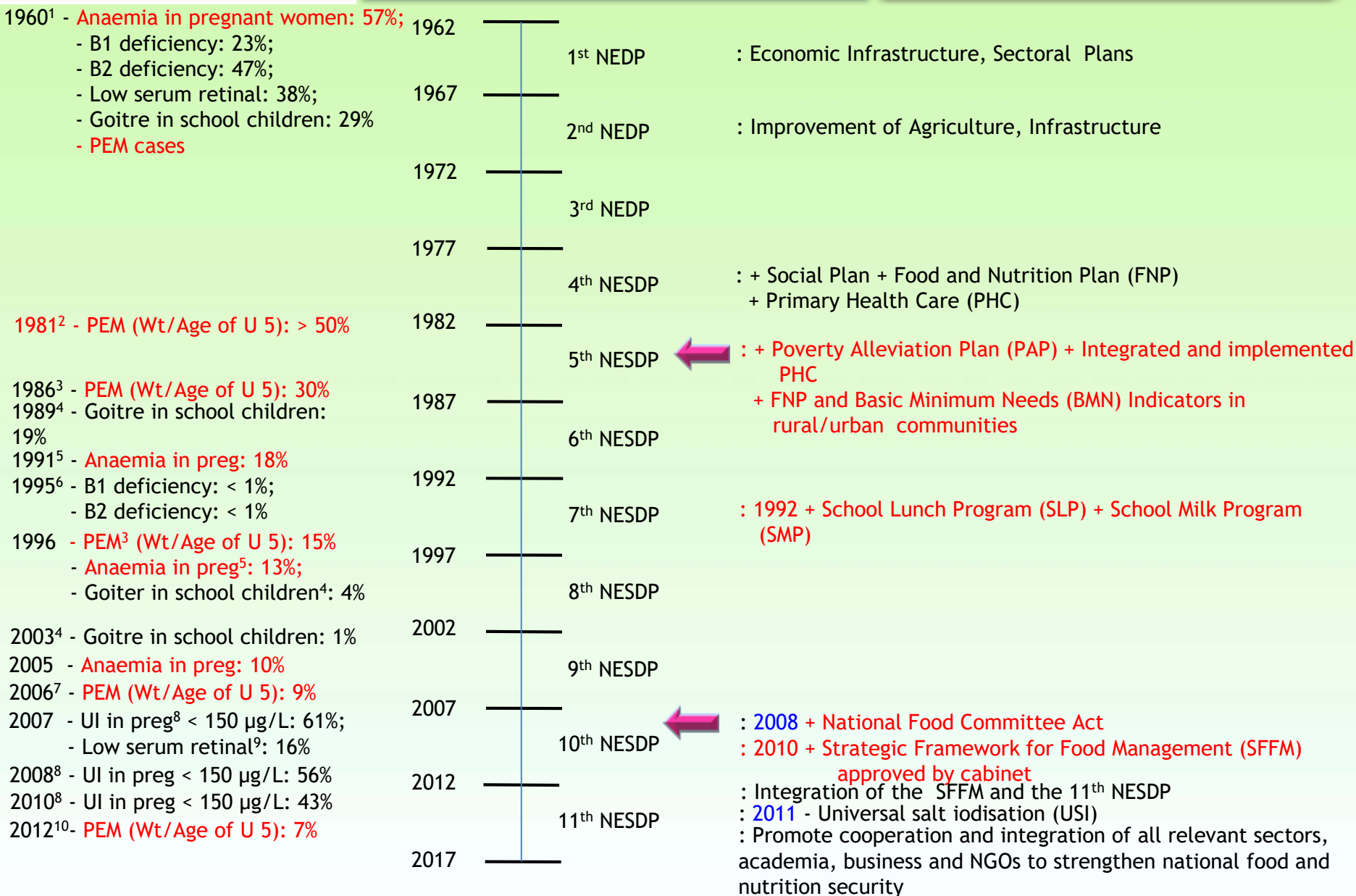


Figure Milestones of Thailand's National Social and Economical Development Plan related to food and nutrition

School milk program in Thailand

- Based on Food Nutrition Plan aiming to provide daily 200 ml of milk to children in kindergartens and primary school 200 days/ year
- The program has been implemented since 1992 along with school lunch program in kindergartens and gradually stepped up to cover 6 grade-students in 2009
- School milk program has created demand for local dairy industry



Strategies/ actions to prevent and control of malnutrition

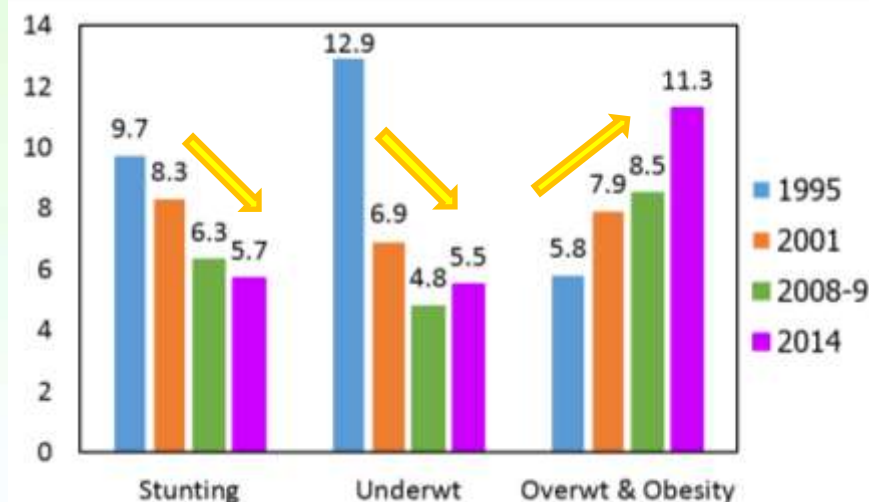
1. **Food based approach**: ensuring food security, food fortification, food regulation.
2. **Supplementation** with micronutrients/food
3. Food, nutrition and dietetic **education**/communication
4. **Public health measures**: basic services, immunization, sanitation, water supply, deworming
5. **Community and setting based** (integrated) approaches
6. Others: M&E, R&D, Capacity Building (CB)

Improvement of maternal & child nutrition, Thailand

	1980	1990	2006
ANC coverage %	35	75	95
Anemia in pregnancy %	50-75	18.8	?10
LBW %	16	10	<10
Underweight of under 5 %	51	20	<10

Recent trend of nutritional status of under 5*

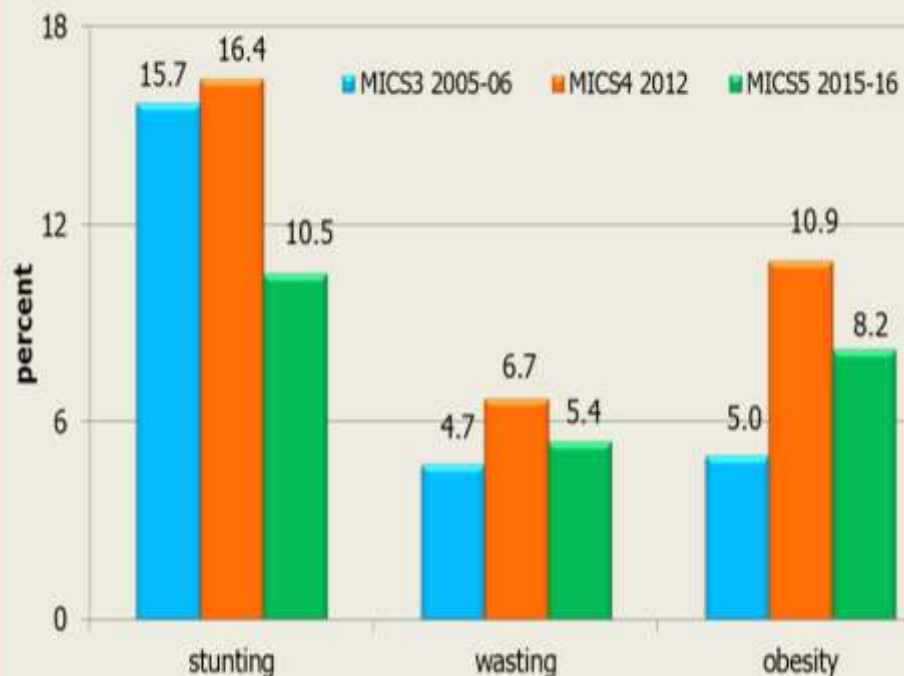
* Source: NHES 2; Holistic Development of Thai Children; NFNS 5; NHES 4; and NHES 5



Global Nutrition Targets 2025 in 2012 WHA Resolution 65.6

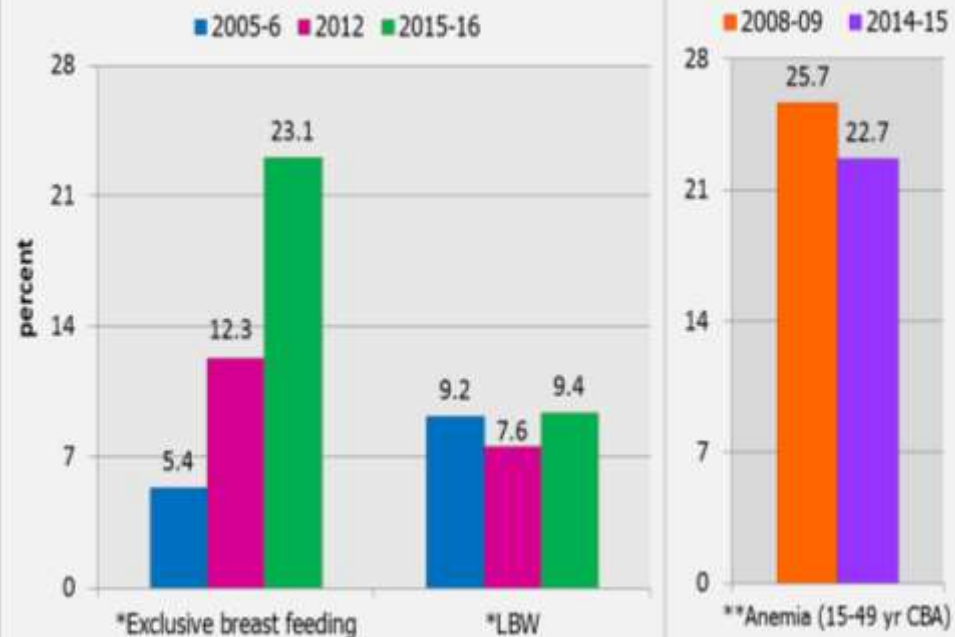
- achieve a 40% reduction in the number of children under-5 who are **stunted**;
- achieve a 50% reduction of **anaemia in women** of reproductive age;
- achieve a 30% reduction in **low birth weight**;
- ensure that there is no increase in **childhood overweight**;
- increase the **rate of exclusive breastfeeding** in the first 6 months up to at least 50%;
- reduce and maintain childhood **wasting** to less than 5%.

Situation of malnutrition among child <5 yrs.



Source : Thailand Multiple Indicator Cluster Survey (MICS3-2006, MICS4-2012, MICS-2015-16)

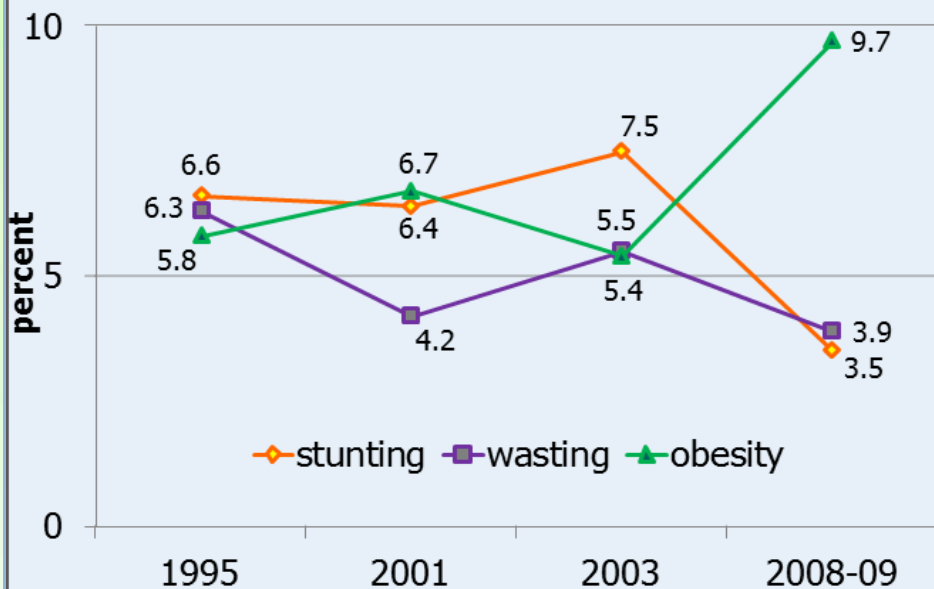
Exclusive breastfeeding 6 m., anemia in CBA women and LBW



Source : *Thailand Multiple Indicator Cluster Survey (MICS3-2006, MICS4-2012 , MICS-2015-16)

** National Health Exam Survey (NHES4-2008-9, NHES5-2014-15)

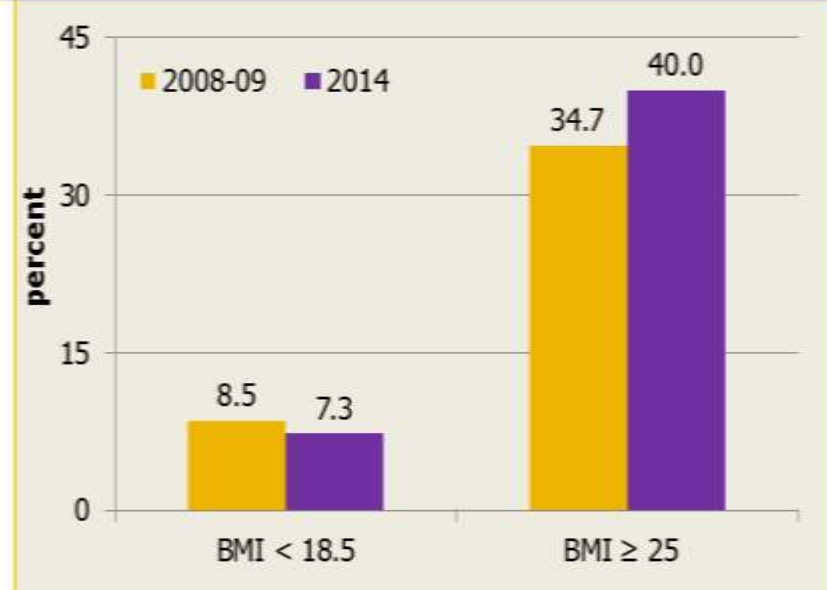
Situation of nutrition among school children



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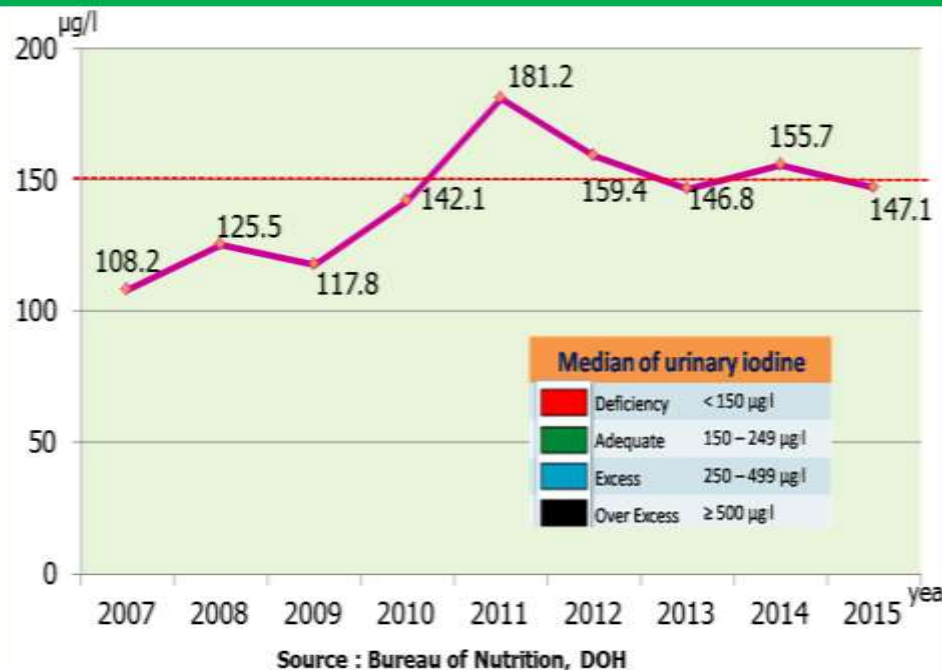
1. การสำรวจสุขภาพประชาชนไทย โดยการตรวจร่างกาย ครั้งที่ 2 1995
2. โครงการพัฒนาการแบบองค์รวมของเด็กไทย 2001
3. การสำรวจอาหารและโภชนาการ ครั้งที่ 5 2003
4. การสำรวจสุขภาพประชาชนไทยโดยการตรวจร่างกาย ครั้งที่ 4 2008-09

Situation of BMI among Thai people 15-59 yrs.



Source : National Health Exam Survey (NHES4-2008-9, NHES5-2014-15)

Median urine iodine in pregnant women



Median UI in 3-5y children and elderly and percentage of qualified iodized salt 2011-2015

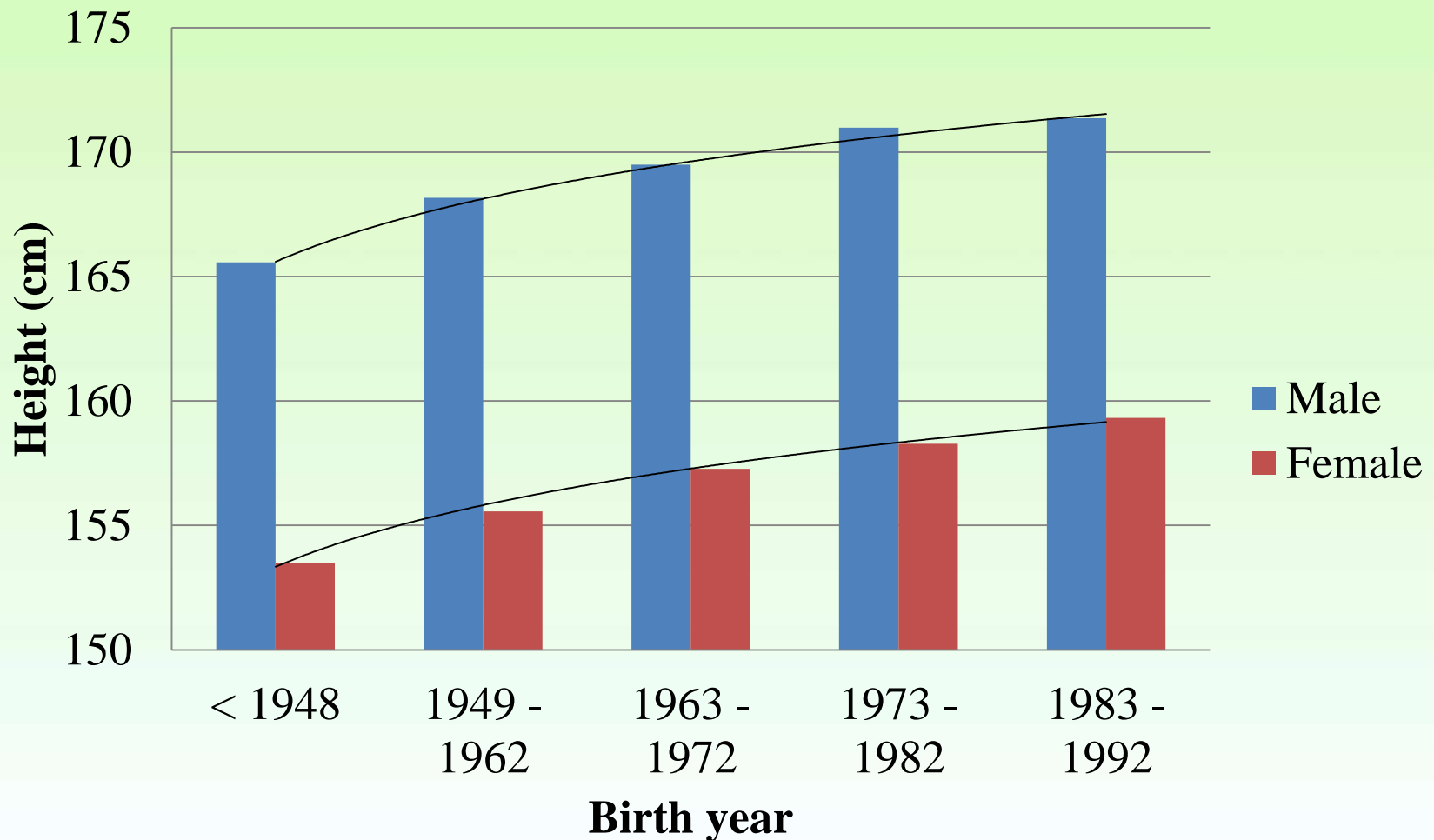
Year	MUIC (µg/l)		%qualified Iodized salt		
	3-5 y	≥60 y	≥30ppm	20-40ppm	≥20ppm
2011	229.2	129.0	72.6	-	-
2012	212.6	108.3	-	60.3	84.6
2013	226.6	113.8	-	82.5	91.9
2014	234.6	111.3	-	83.5	91.5
2015	205.4	108.8	-	78.9	95.3

Source: Bureau of Nutrition

■ deficiency
 ■ more than adequate
 ■ adequate
 ■ excessive

HH coverage of iodized salt in 2014
 = 91.6%

Average heights of Thai males and females born in different years*



*Modified from: http://www.sizethailand.org/region_all.html



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'Malnutrition can be reduced dramatically in two years'

26 June 2009, 12:00am IST

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*With nearly 60 per cent of its children undernourished, Madhya Pradesh is worse off than sub-Saharan Africa. Thailand's **Kraisid Tontisirin**, renowned for his work in [nutrition](#) and poverty alleviation, was recently in Madhya Pradesh, offering expert advice on behalf of UK's Department for International Development that is funding MP's nutrition programme with a 60 million pound assistance package. He spoke to **Narayani Ganesh** :*



Can Thailand's experience help MP's poor nutrition record?

What MP is experiencing now is very similar to what Thailand faced during 1982-85 the GDP, population and malnutrition figures are comparable. Among MP's under-five-year-old children, 45-60 per cent are underweight; 60-75 per cent are anaemic. Antenatal care coverage is barely 35 per cent. Only 45 per cent have access to basic sanitation, latrines and

water. And this was Thailand's situation in 1980s. But within a decade, Thailand managed to reduce the number of underweight under-fives from 51 to 20 per cent, increase antenatal cover from 35 to 75 per cent (now 95 per cent), reduce anaemia in pregnancy from 50-75 per cent to 18 per cent. Current figures are a huge improvement over these, with less than 10 per cent of the population still needing improvement. Pre-packed granola-type [nutrition bars](#)

Madhya Pradesh

HINDUSTAN TIMES, BHOPAL WEDNESDAY, JUNE 24, 2009

'Mobilise masses to fight malnutrition'

Chairman of the Policy Board of The Thailand Research Fund, who has served as Director of Food and Nutrition Division of Food and Agriculture Organisation (FAO) of United Nations, **Prof Kraisd Tontisirin** - a paediatrician basically - has been instrumental in Thailand's successful crusade against malnutrition. Prof Tontisirin was in city under an DFID initiative to share lessons on malnutrition combating with MP Government. He spoke at length with **Sravani Sarkar** on the road that MP could take to reduce malnutrition drastically.

What is the most basic change required in the present system to tackle malnutrition in MP?

Situation in MP is exactly like Thailand 20 years ago with same population, same socio-economic conditions and even same indicators of malnutrition among children and pregnant women. My interaction here tells me that MP has strong political leadership, strong bureaucratic commitment, a multi-sectoral team willing to take up the job, a clear understanding of the problem and a reasonable service system in place. What is of immediate necessity is mass social mobilization for reaching to the unreached and strengthening and expansion of the basic civic and health services to the target group. Also improvement of quality of services is important.

What exactly do you mean by mass social mobilization? How would it help?

You need to involve the community directly as volunteers/mobilisers to become a link between beneficiaries and the service providers. This could



face to face

Use of basic indicators for care of pregnant women, infant and young children and increasing coverage of basic civic and health facilities are of importance.

PROF KRAISID TONTISIRIN

be done with help of community leaders - social or political. Going by Thailand experience, one mobiliser per ten households should be the target. They could be trained in the basic aspects. They could be very helpful as they would know local conditions, problems and the effective ways to deal them. They would also instill confidence among the beneficiary groups.

But it might entail a long process that would take up a lot of time?

Not at all. One needs to start the process at selected areas - preferably the malnutrition-endemic areas - as learning period projects. In these selected areas, the service providers - meaning members of the multi-sectoral official teams and the community leaders can visit the areas and with consensus of people select a mobiliser. This mobilisers could be provided ten-day training and later be recognized publicly for their efforts. This has worked perfectly in Thailand.

What should be the overall strategy in the present scene, since the problem is multi-faceted?

Apart from mass mobilization, use of basic indicators for care of pregnant women and infant and young children and increasing coverage of basic civic

and health facilities are of utmost importance. It has to be ensured that the target groups get enough food, eat it and use it remain healthy. Ante-natal care in form of provision of multi-vitamins, iron and folic acid tablets, regular check ups and immunization of pregnant women is must. For young children, breast feeding for first six months followed by supplementary diet is to be taken up. The emphasis should be on locally available food and harp on growing nutritious food including vegetable and fruit. Clean water and sanitation and well as best of primary health services is required. This is where multi-sectoral approach would be helpful. This would see drastic reduction in malnutrition during first two years with further reduction during next three to four years, like in Thailand.

How to tackle traditional misbeliefs that often proves to be obstacle?

Social beliefs could be categories as undesirable, desirable and neutral. The undesirable beliefs often arise from bad experiences or consequences in past. These are to be slowly edged out by instilling belief in the community that the good practices could change the consequences.



Follow Thailand model: Chouhan

HT Correspondent
Bhopal, June 23

CHIEF MINISTER Shivraj Singh Chouhan has instructed the officials of the Department of Women and Child Development to prepare an action plan to combat malnutrition on the model developed by Thailand.

The instructions were issued after the CM met nutrition expert and member of Policy Board of The Thailand Research Fund Prof Kraisd Tontisirin on Tuesday. Health Advisor of DFID India Anne Philpott, nutrition policy advisor Shashi Prabha Gupta, nutrition expert Farheen Khurshid, principal secretary of the DWCD Tinnu Joshi and secretary to CM Anurag Jain were present.

The DFID is supporting a nutrition and health programme of the MP Government. The 60 million pound support is for duration of five years ending in 2012. Prof Tontisirin's visit was part of the DFID's technical support to the State Government.

Speaking on the occasion, the CM described malnutrition as a challenge for the

State Government and reiterated his commitment towards women and child development in State. He gave details of the various programmes of the State Government to the delegation. He mentioned that Project Shaktiman has been launched in 40 malnutrition-hit tribal clusters of State and would soon to extended to entire project.

Prof Tontisirin shared his experiences from successful combating of malnutrition in Thailand in 1980s when the situation of the country was almost similar to State of Madhya Pradesh including the population, socio-economic conditions as well as health and nutrition indicators. Thailand reduced malnutrition from 50 pc to 25 pc within a decade and a half by taking up specific action plan.

The expert also held discussions with officials of various related departments including DWCD, health, PHE, rural development, agriculture and others in a joint meeting.

Earlier on Monday, he visited an anganwadi centre at Vidisha and Rangai and visited Kurwai and Nateran blocks of Vidisha district.

Conclusion

- Thailand had reduced maternal and child malnutrition successfully since the eighty using community based approaches under the Poverty Alleviation Plan (PAP).
- Success experience has been currently employed through all strategies and particularly through the Strategic Framework for Food Management (SFFM) under the National Food Committee with the aims for food and nutrition security, elimination of some remnants of under-nutrition and prevention and control the rising trends of obesity and NCDs.



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- Introduction
- Policy and strategy for alleviation of under-nutrition
- Current nutrition challenges:
strategic plan and actions
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Food and Nutrition Challenges*

- **Some remnant of under-nutrition**
 - ▶ **Undernourished or hunger and stunting and underweight of under five**
 - ▶ **Micronutrient deficiencies: of iron, iodine, vit. A**
- **Overnutrition and diet related diseases**
 - ▶ **Overweight & obesity**
 - ▶ **NCDs: Diabetes mellitus, high blood lipids, high blood pressure, cardio-vascular diseases**
 - ▶ **Cancers**
- **Food safety and quality**

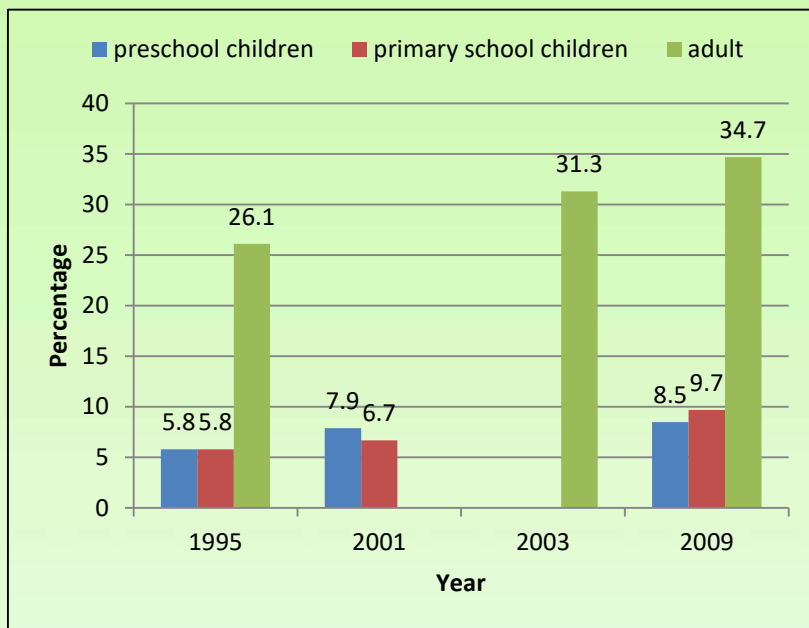


Figure 6 Prevalence of **overweight and obesity** in the Thai population

Source: Bureau of Policy and Strategy (1996); Bureau of Policy and Strategy (2006); Aekplakorn et al (2011b)

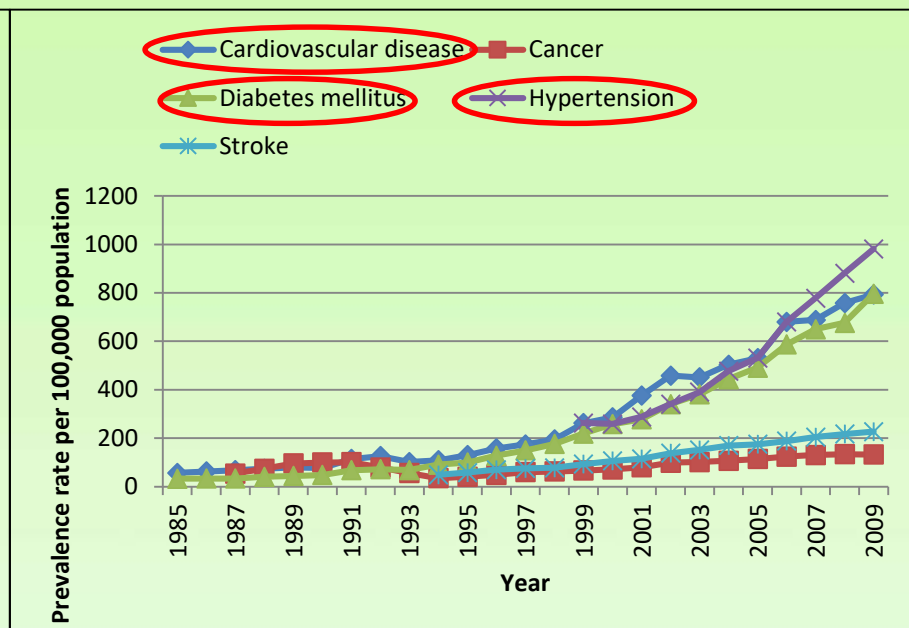


Figure 7 Increase in prevalence of **non-communicable diseases** in Thailand

Source: Bureau of Policy and Strategy (2011)

Thai males consume fruit and vegetable daily only 268 g and females 283 (Aekplakorn *et al.* 2011)

Medical expenses for treating and managing NCDs were estimated at 140 billion Baht

Several organizations and agencies are conducting projects/programmes focusing especially on nutrition education and public campaigns.

National Food Committee



Str Framework for Food Mgt (SFFM)

- Multi-stakeholder approaches
- SFFM covers: Food Security, quality & Safety, Education & research, and Management
- Linking of food, nutrition & health implemented at central & community levels for nutrition and p/c of NCDs
- Roles of agriculture and food systems:
 - .Ensuring nutritious and safe food supply i.e fruits & veg; low sugar, fat & sodium food; legume & fishes, milk ...etc
 - .Facilitation of trade and tourism
 - .Caring of environment & sustainable agriculture.

Key Elements of Strategic Framework for Food Management in Thailand



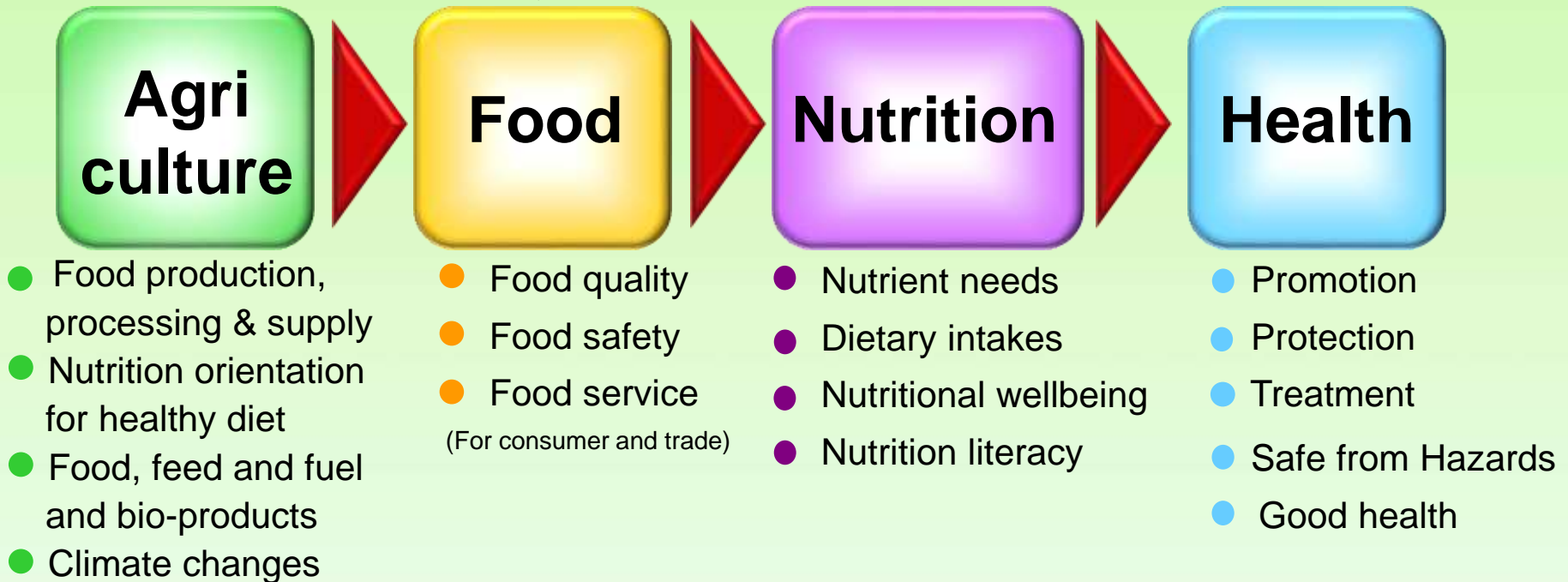
Prepared by
The Secretariat of The National Food
Committee

Vision



“Thailand ensures food and nutrition security, and is a sustainable source of nutritious and safe food with premium quality for Thai and the world”

Continuum from agriculture, food, nutrition to health



Food and Nutrition Security

Food, Nutrition & Dietetic Education

Food Culture

Technology

Food Chain Approach

**Safe and
Nutritious
Food**

OUTCOMES

**Good Manufacturing
Practices**

**GOOD
PRACTICES**

Good Hygienic Practices

Good Agricultural Practices

**Plant and Animal
Agro- Biodiversity
(Genetics)**

**Nutrition For
Plant and Animal**

**Plant and Animal
Diseases
Prevention and
Control**

BASIC ISSUES

Land Use

Water Management

Theme 1 : Food Security

Principle : Ensuring a sustainable food security and effective management of food production resources by active stakeholders participation



Theme 2 : Food Quality and Safety

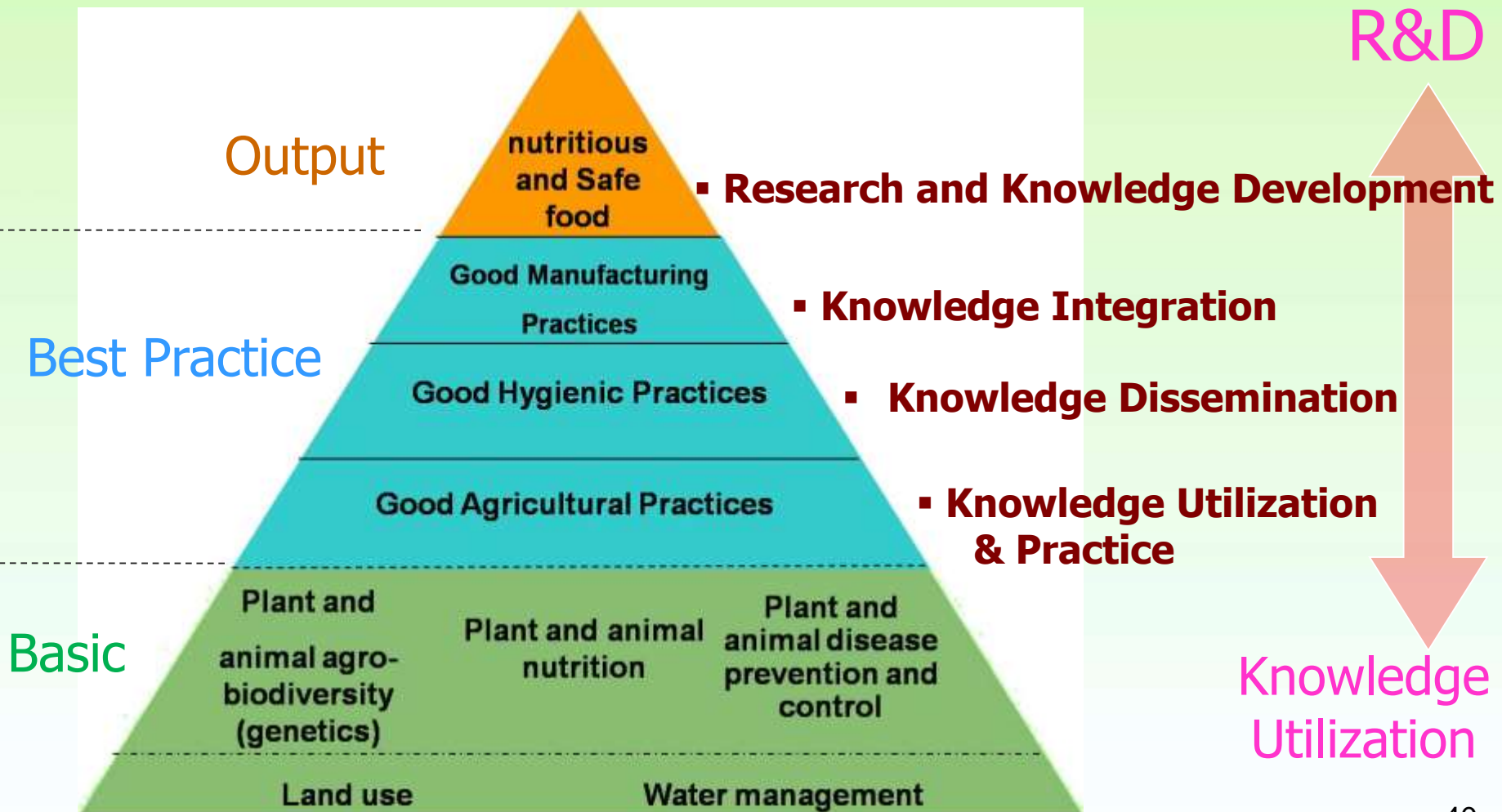
Principle : Ensuring high quality and safe food to protect consumer health and to facilitate domestic/international trade

Trading & marketing promotion
To protect consumer and create fairness as
well as facilitating trading



Theme 3 : Food Research and Education

Principle : R&D and knowledge utilization through engaging stakeholders in sustainable and effective use of food production resources along the food chain and also strengthening desirable consumption behavior for well-being



Linking of Food, Nutrition and Health



Community Based Program for Health Promotion

Menu (*Activities*)

- Antenatal care
- Growth monitoring /promotion
- Elderly cares
- Cares of NCDs
- Food production
- Nutrition education
- Food sanitation & safety
- Other activities (Tobacco and alcoholic consumption control)
- Recreation and physical activities)
- Etc.

Minimum Basic Services

(Health, Education, Agricultural Extension)

Supportive System

- Training
- Funding
- Problem Solving
- Supervision

Interface

(service providers and community leaders)

- Plan/goals
- Implementation
- Monitoring/evaluation

Community Leaders

Family

Individual

**Minimum Indicators
of well-being & NCDs**

Facilitators



Volunteers

(1:10 households)



Thailand: Agriculture & Food Systems for...

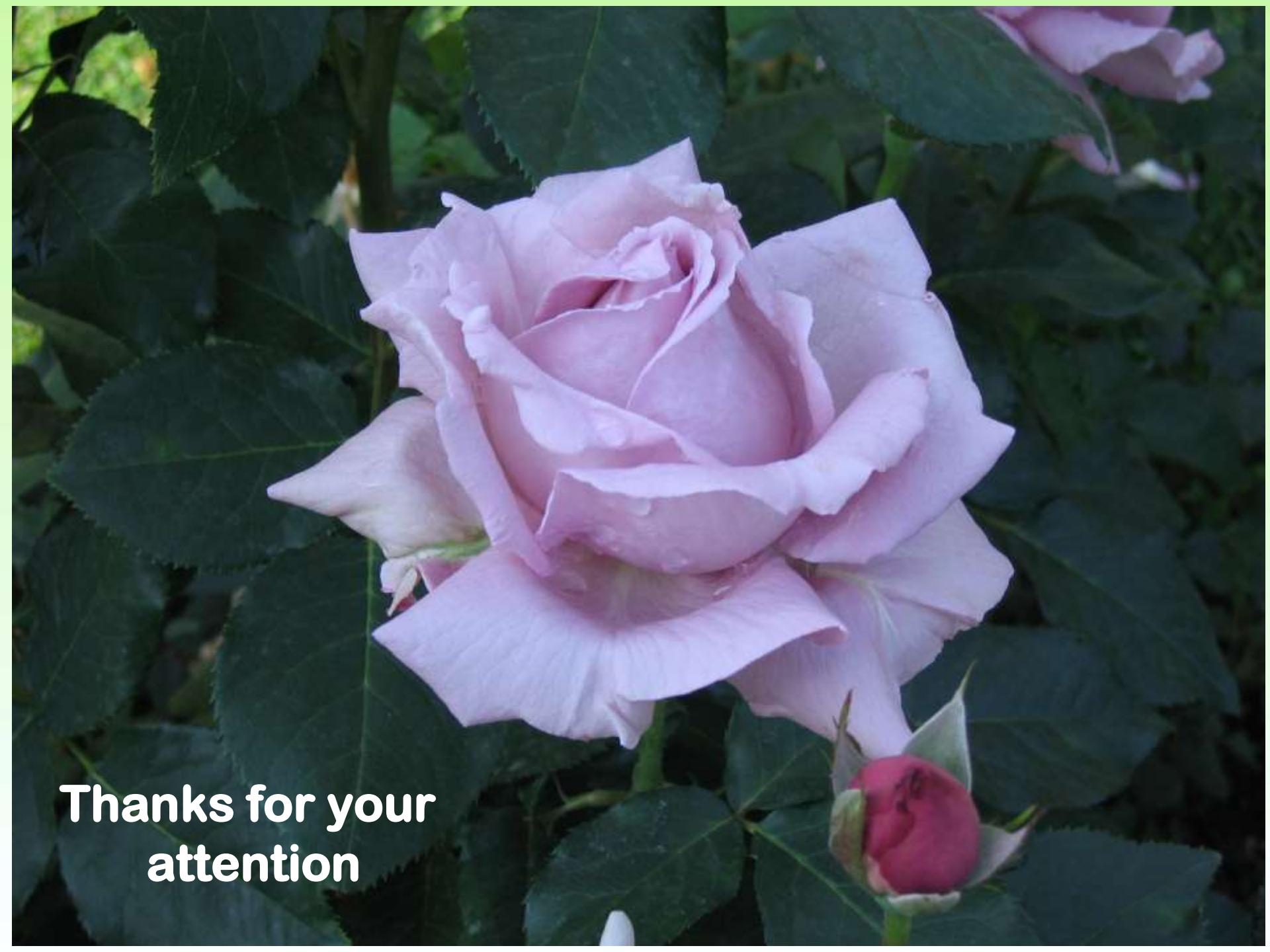


Some Sustainable Development Goals (SDGs)

17 Goals &

169 Targets

- 
- End Poverty everywhere
 - End hunger, improved nutrition and Promote sustainable agriculture
 - Attain healthy lives for all
 - Provide quality education for all
 - Attain gender equality, empower women and girls
 - Ensure availability and sustainable use of water and sanitation for all
 - Ensure sustainable energy for all
 - Make cities and human settlements inclusive, safe and sustainable
 - Promote production and consumption patterns
 - Tackling climate change and its impacts
 - Protect and promote use of terrestrial ecosystems, halt desertification land degradation and biodiversity loss
 - Strengthen the means of implementation and the global partnership for sustainable development



**Thanks for your
attention**