

# **WHO Conference on Health Aspects of Tsunami Disaster in Asia**

**Phuket, Thailand  
4–6 May 2005**



**World Health  
Organization**

# **FOOD SECURITY AND NUTRITION on the Tsunami Crisis Indonesian Experiences**

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# COASTAL AREA AFFECTED

## IN NANGGROE ACEH DARUSSALAM (NAD) & NORTH SUMATRA

### NAD:

Total Population pre-tsunami: 4,297,485

# of population affected: 469,000

# of district affected: 13 out of 21

# villages affected 654 out of 5736

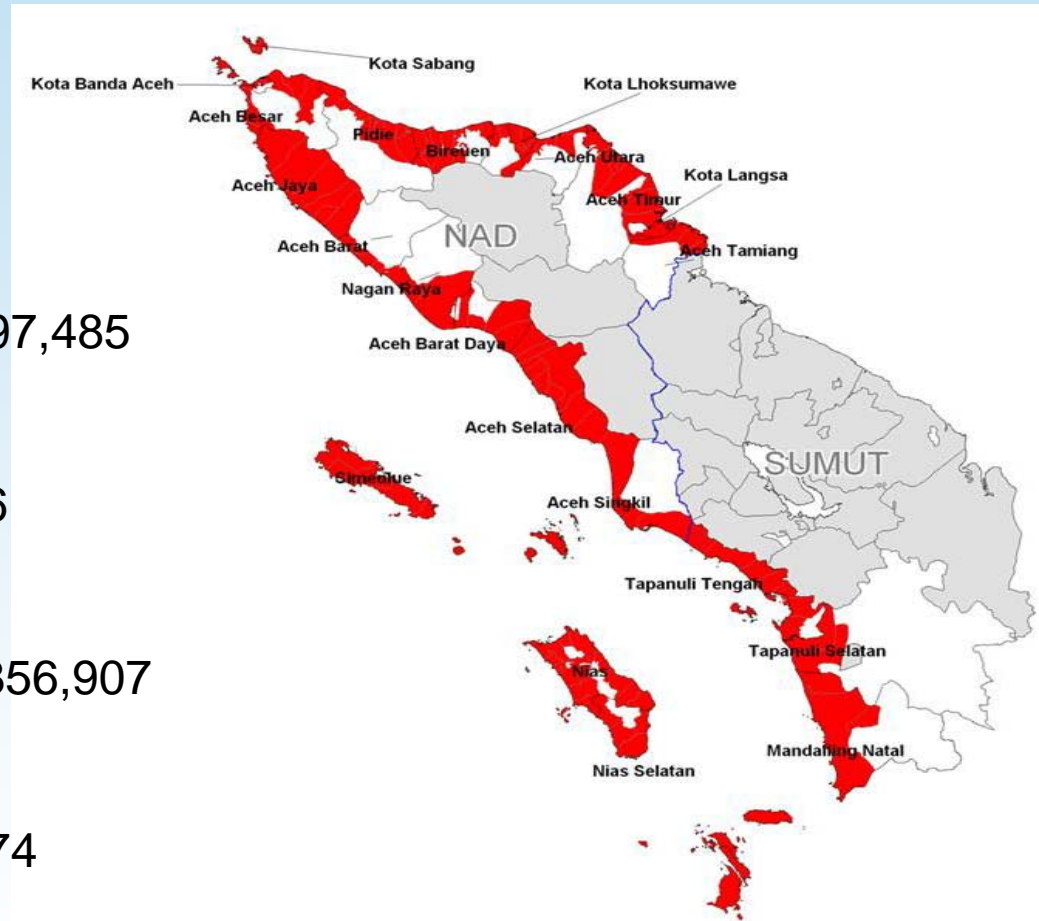
### North Sumatra:

Total population pre-tsunami: 11,856,907

# of population affected: 290,000

# of district affected: 3 out of 25

# of village affected 219 out of 5374



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# OUTLINE

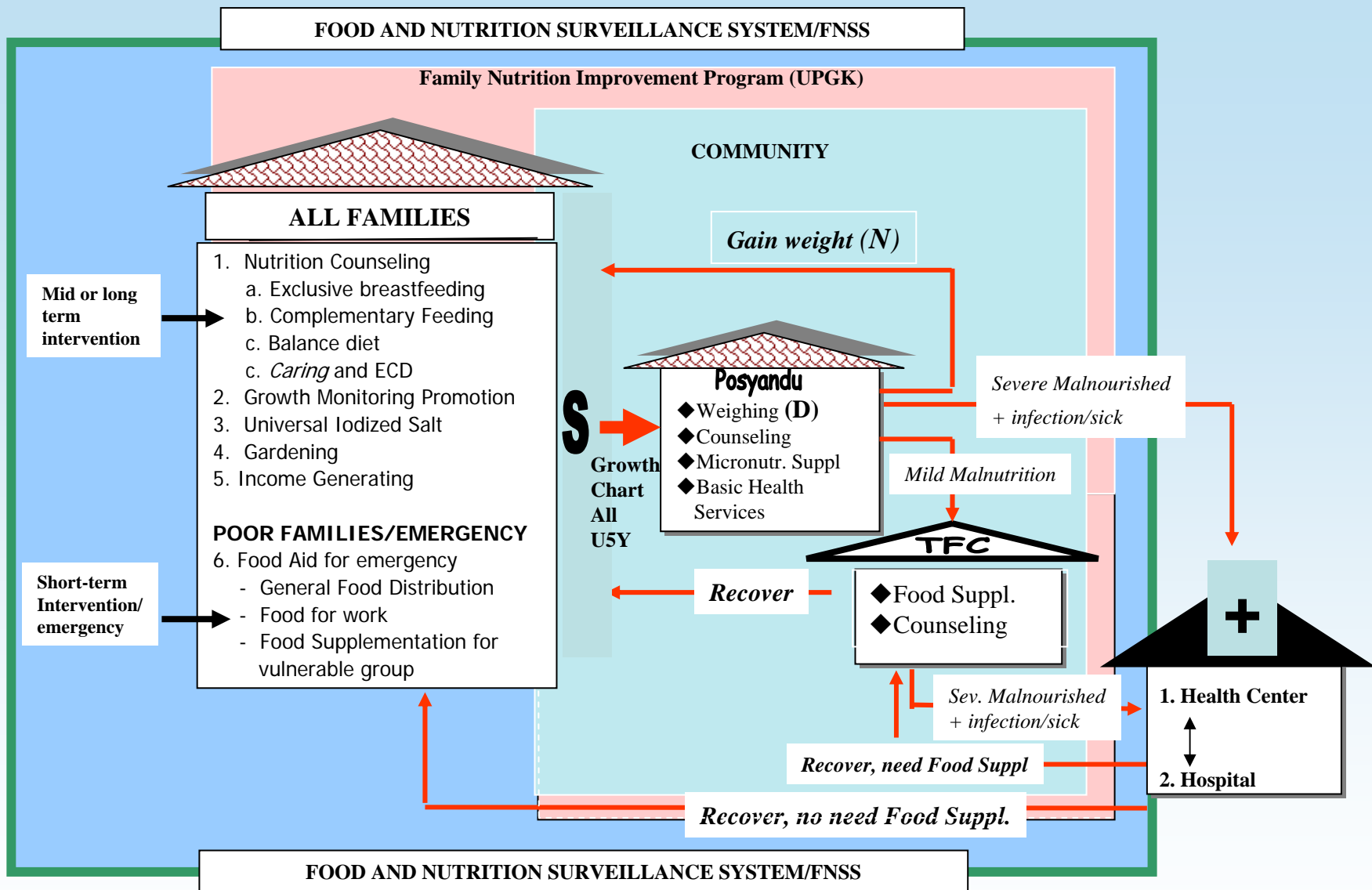
<b>PRE-TSUNAMI</b>	<b>GUIDELINE DEVELOPMENT FOR NUTRITION EMERGENCY; SOCIALIZATION; CAPACITY BUILDING</b>
<b>1-7 DAYS POST TSUNAMI</b>	<b>SENDING TEAM FOR EMERGENCY RELIEF; FOOD, MICRONUTRIENT SUPPLEMENT; MEDICINE, WATER DISTRIBUTION</b>
<b>2 – 3 WEEKS POST TSUNAMI</b>	<b>PRELIMINARY ASSESSMENT; REFUGEE REGISTRATION; PLAN OF ACTION FOR EMERGENCY; INTERVENTION; SURVEILLANCE</b>
<b>2 – 3 MONTHS POST TSUNAMI</b>	<b>RAPID NUTRITION ASSESSMENT; INTERVENTION, SURVEILLANCE; MASTER PLAN DEVELOPMENT (FOR EMERGENCY, REHABILITATION, RECONSTRUCTION);</b>
<b>4 MONTHS – PRESENTS</b>	<b>INTERVENTION; SURVEILLANCE; HEALTH AND NUTRITION PROMOTION; COMMUNITY EMPOWERMENT, REGIONAL CENTER DEVELOPMENT FOR DISASTER</b>



# Pre-tsunami

- Development of guideline for nutrition in emergency (2002) to anticipate nutrition intervention for IDP as the effect of conflict and natural disasters in several provinces
- Training for staffs from involved sectors based on this guideline
- Socialization a framework of nutrition program





# FRAMEWORK OF NUTRITION PROGRAM



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# 1 – 7 days post tsunami

- **Sending nutritionist to affected areas**
- **Working together under the coordination of health crisis center (MOH) and BAKORNAS PBP**
- **Supporting provincial health office and some affected districts**
- **Providing guidance and expertise on the spot**
- **Applying joint statement of WHO-UNICEF-IDA1 for infant feeding practices in emergency**



# 2 – 3 weeks post tsunami

- **Preliminary assessment for the needs of IDPs (WFP)**
- **Implementing Preliminary Nutrition Assessment in Aceh Besar and Banda Aceh (Food & Nut. Research Center-MOH, and UNICEF)**
- **Developing plan of action for emergency reaching commitment “who will support what” to handle 514,000 IDPs in camp, plus 280,000 IDPs in host families (check table 1)**
- **Implementing integrated services in terms of food and micronutrient suppl. distribution, medicine, and water to IDPs**
- **Daily meeting**



# THE POLICY

- **Nutrition services for all disaster victims provided free of charge;**
- **Mobilization, transportation of food commodities and nutrition services conducted on an urgent basis with special procedures**
- **Food and nutrition aid with applicable rules**
- **Implementing nutrition services involving inter-programs – integrated package**
- **Prioritizing nutrition services in high-risk groups**



# Table 1. Matrix for Food Security & Nutrition Response

LINE MINISTRIES, DONOR AGENCIES	COMITTMENT FOR INTERVENTION
BAKORNAS PBP	FOOD RATIONS FOR ALL AFFECTED POPULATION DURING EMERGENCY PHASE
MOH	FORTIFIED BLENDED FOOD AND BISCUIT FOR CHILDREN 6-24 MONTHS, VIT. A CAP; CAP. BUILDING; MANAGEMENT SUPPORT
UNICEF	VIT. A CAPSUL ALBENDAZOLE, IRON TABLETS; PRELIMINARY SURVEY, AND RAPID NUT SURVEY; PROPOSED REV. POSYANDU, NUTRITION SURV.; CAPACITY. BUILDING;
WFP	GENERAL FOOD DISTRIBUTION; FORTIFIED BISCUIT AND NOODLES; FOOD FOR ASSETS; FOOD FOR SUPPORT TRAINING OF TEACHERS; CAP. BUILDING, FOOD AND NUT. SURV
WHO	MANAGEMENT OF SEVERE MALNOURISHED CHILDREN; TECHNICAL ASSISTANCE AND COORDINATION IMPROVEMENT
HKI	VIT. A CAPS; SPRINKLE; FORTIFIED SOY SAUCE; ZINC TAB; VIT. A PROMOTION KITS, REAP
ADB	HEALTH AND NUTRITION PROMOTION; TRAINING FOR NUTRITION STAFF; NUTRITION INTERVENTION

# 2 – 3 Months post tsunami

- **RAPID NUT. ASS IN 13 AFFECTED DISTRICTS (NAD)  
– check results**
- **DISTRIBUTION OF GENERAL FOOD,  
SUPPLEMENTARY FEEDING, MICR. SUPPLEMENTS**
- **INTEGRATED SURVEILLANCE**
- **WEEKLY NUTRITION MEETING**
- **COORDINATION MEETING**
- **MASTER PLAN DEVELOPMENT COORDINATED BY  
NATIONAL BUREAU OF PLANNING**



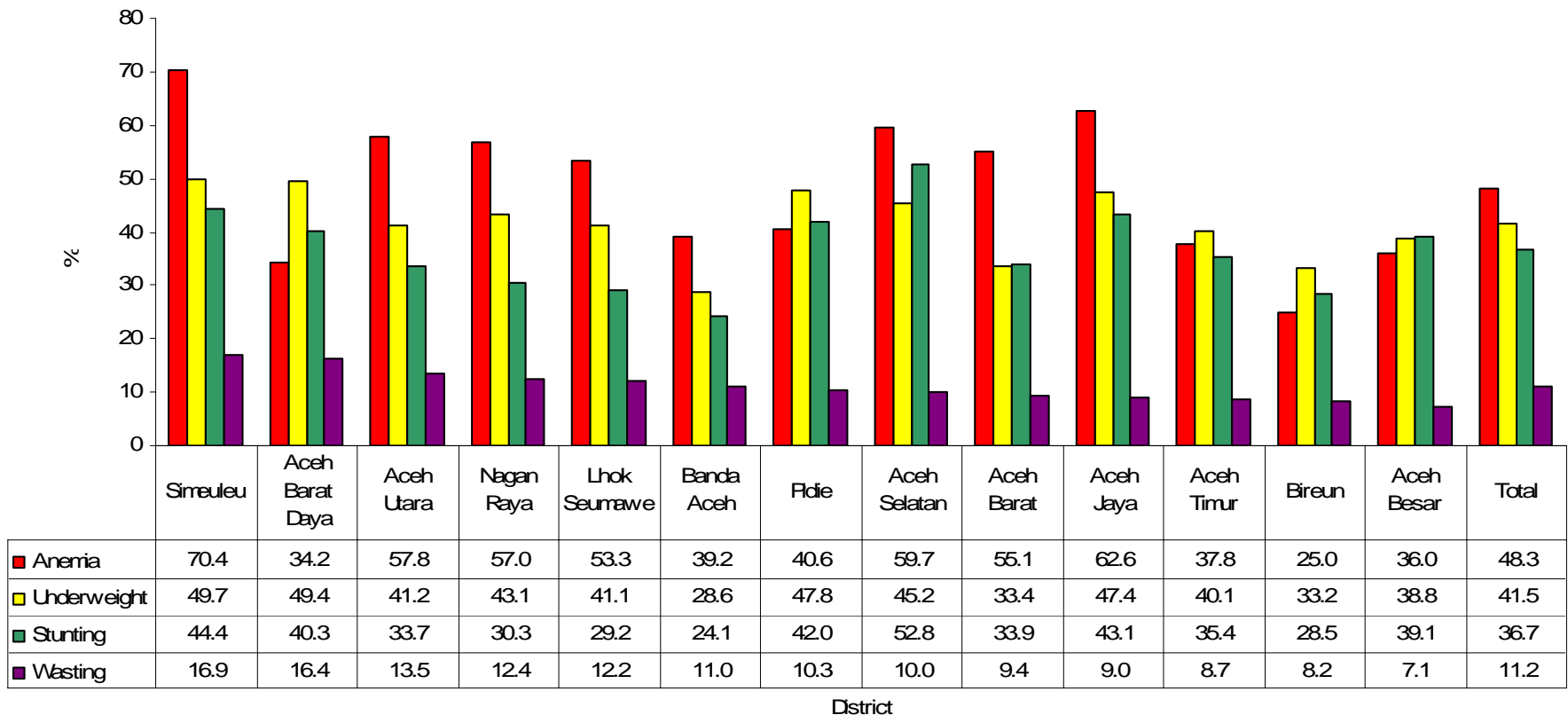
**HEALTH AND NUTRITION SITUATION  
BASED ON RAPID ASSESSMENT SURVEY  
IN 13 AFFECTED DISTRICTS OF NAD  
FEBRUARY 22 TO MARCH 15, 2005**

***SAMPLE SIZE:  
255 CLUSTERS;  
3,735 HOUSEHOLDS;  
4,024 WOMEN AGE 18-45 YRS;  
4,030 CHILDREN 6-59 MONTHS***



# PREVALENCE OF MALNUTRITION AMONG CHILDREN UNDER 5

## ANEMIA (Hb <11g/dl), UNDERWEIGHT, STUNTING, WASTING <-2SD)

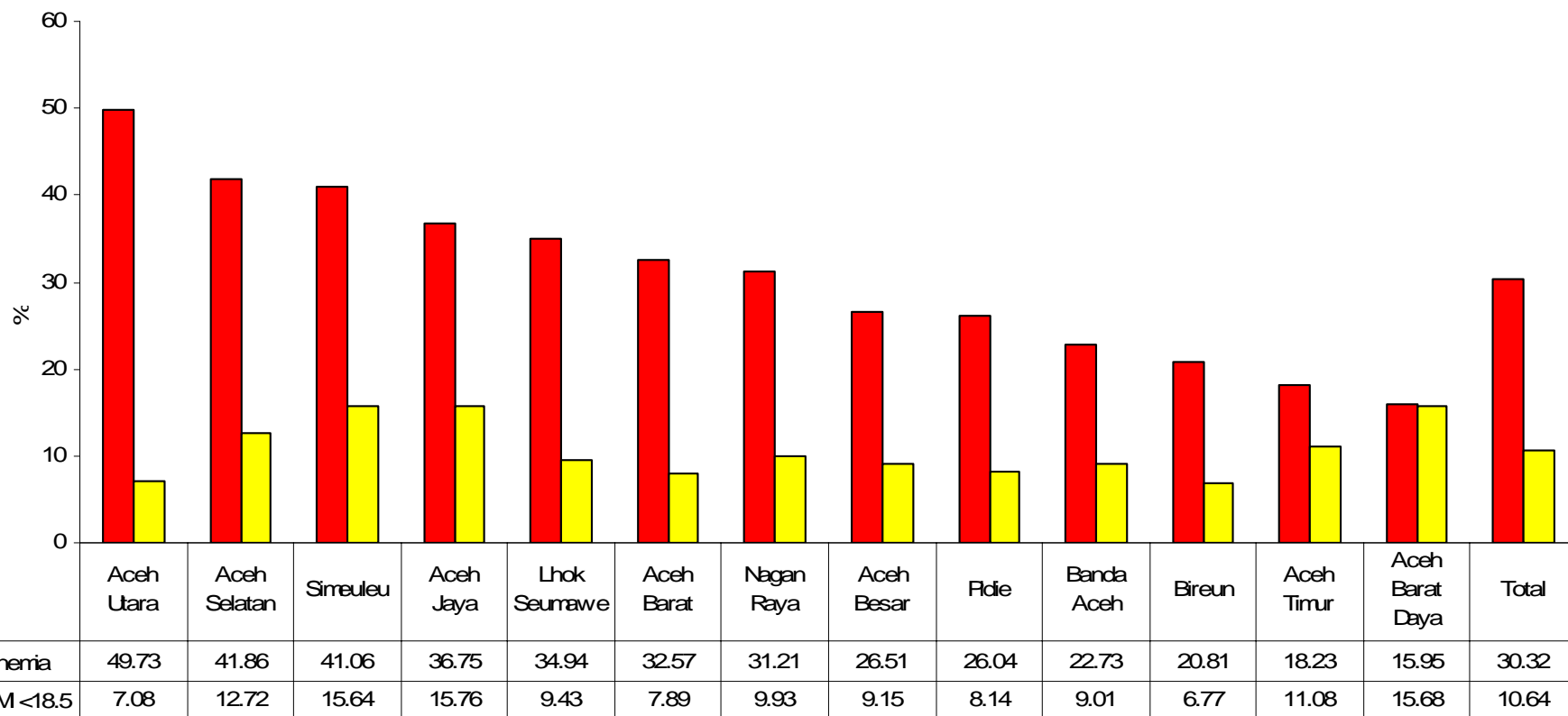


# Proportion of children under five having health complaint in the previous 2 weeks

District	Type of disease					
	Cough/ARI	Diarrhea	Skin Infection	Fever	Measles	Vomiting
Aceh Jaya	62.46	50.15	16.72	46.92		18.77
Nagan Raya	46.82	34.11	28.76	58.53	2.68	13.71
Aceh Barat	51.78	37.86	29.45	57.28	1.29	18.12
Pidie	43.59	20.83	30.13	58.01	1.28	4.49
Lhok Seumawe	28.08	7.26	12.30	44.16	1.26	1.89
Aceh Utara	29.45	9.04	16.62	44.02	2.62	5.54
Bireun	42.44	19.19	38.08	54.65	7.27	13.08
Aceh Timur	56.23	21.33	32.13	62.33	1.11	20.78
Simeuleu	60.67	33.99	41.01	59.27	3.65	18.26
Aceh Barat Daya	62.65	38.53	23.24	74.12	15.00	35.00
Aceh Selatan	43.89	17.55	19.75	55.80	0.63	8.15
Aceh Besar	33.33	6.47	10.68	25.57	0.32	2.91
Banda Aceh	39.40	12.91	14.57	35.43	0.99	4.64
<b>Total</b>	<b>46.54</b>	<b>23.97</b>	<b>24.37</b>	<b>52.30</b>	<b>3.01</b>	<b>13.01</b>



# PREVALENCE OF ANEMIA (Hb < 12g/dl), AND MALNOURISHED (BMI <18.5) WOMEN AGE 18 – 45 YEARS IN 13 AFFECTED AREAS, NAD



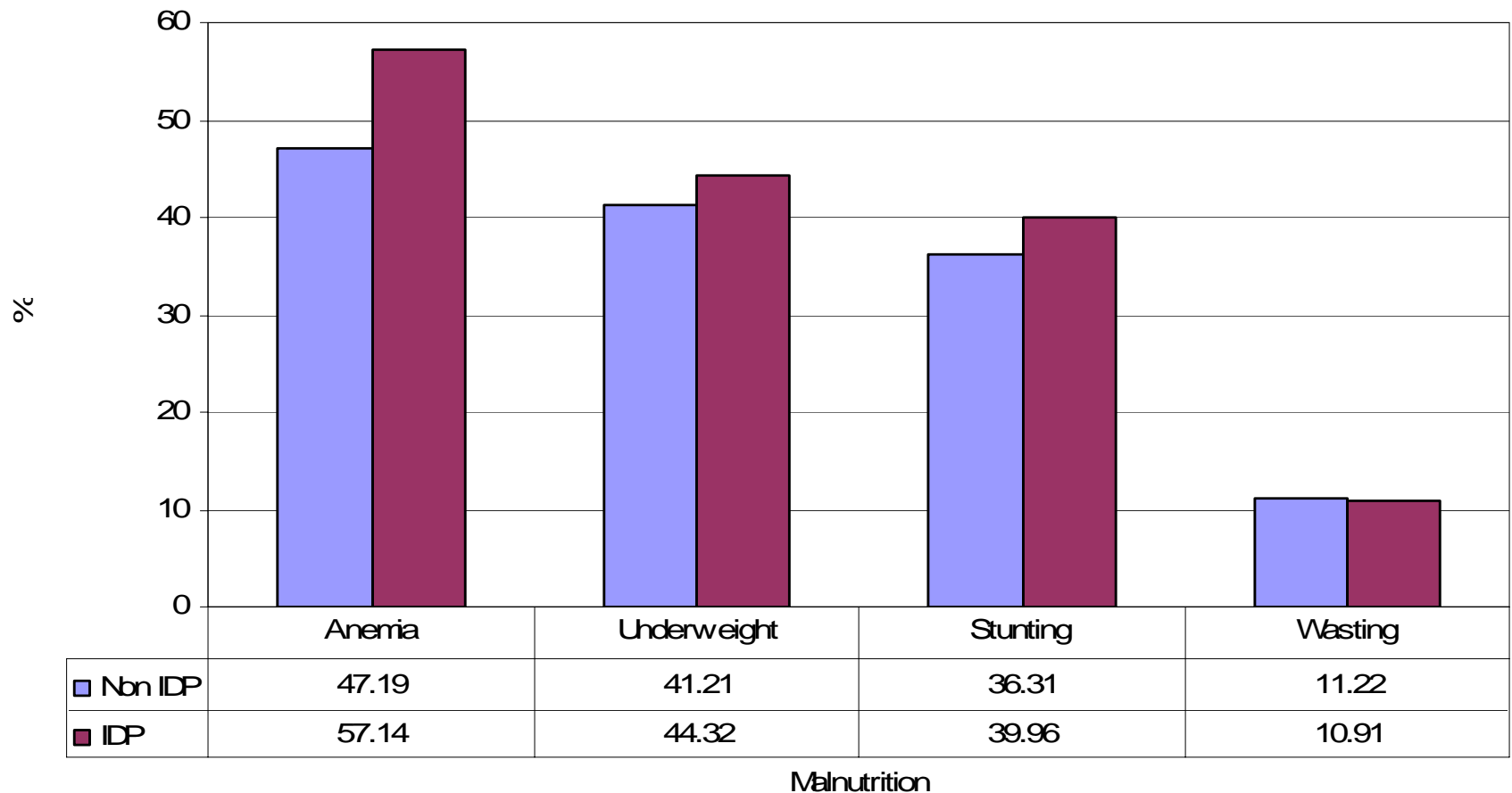
District

## Proportion of Women age 18-45 years having health complaint in the previous 2 weeks

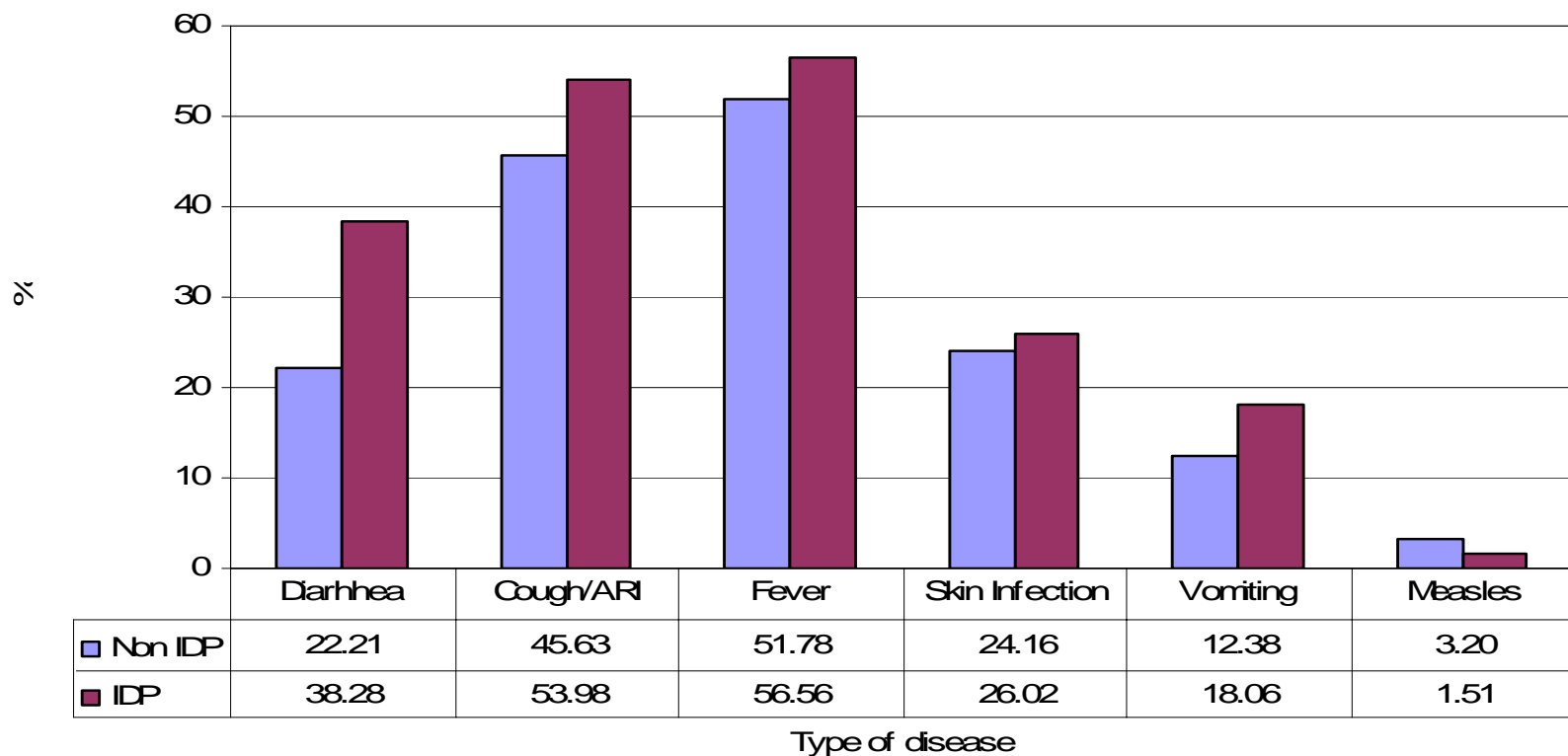
District	Type of disease				
	Cough/ARI	Diarrhea	Skin Infection	Fever	Vomiting
Aceh Jaya	35.16	15.63	7.03	21.09	12.50
Nagan Raya	23.36	9.87	17.43	23.36	7.89
Aceh Barat	31.43	17.14	15.14	28.29	11.71
Pidie	17.53	5.75	17.81	14.79	7.40
Lhok Seumawe	10.09	1.78	2.08	14.54	1.78
Aceh Utara	6.22	1.81	2.85	9.84	1.81
Bireun	29.68	9.80	25.36	31.99	12.39
Aceh Timur	24.73	5.91	22.58	26.61	11.29
Simeuleu	36.41	12.61	21.01	34.45	12.32
Aceh Barat Daya	40.69	16.91	12.89	41.55	26.36
Aceh Selatan	18.90	3.94	6.04	19.16	6.56
Aceh Besar	17.07	3.29	4.49	5.99	0.90
Banda Aceh	21.66	4.81	10.43	10.16	6.15
<b>Total</b>	<b>24.03</b>	<b>8.36</b>	<b>12.61</b>	<b>21.57</b>	<b>9.16</b>



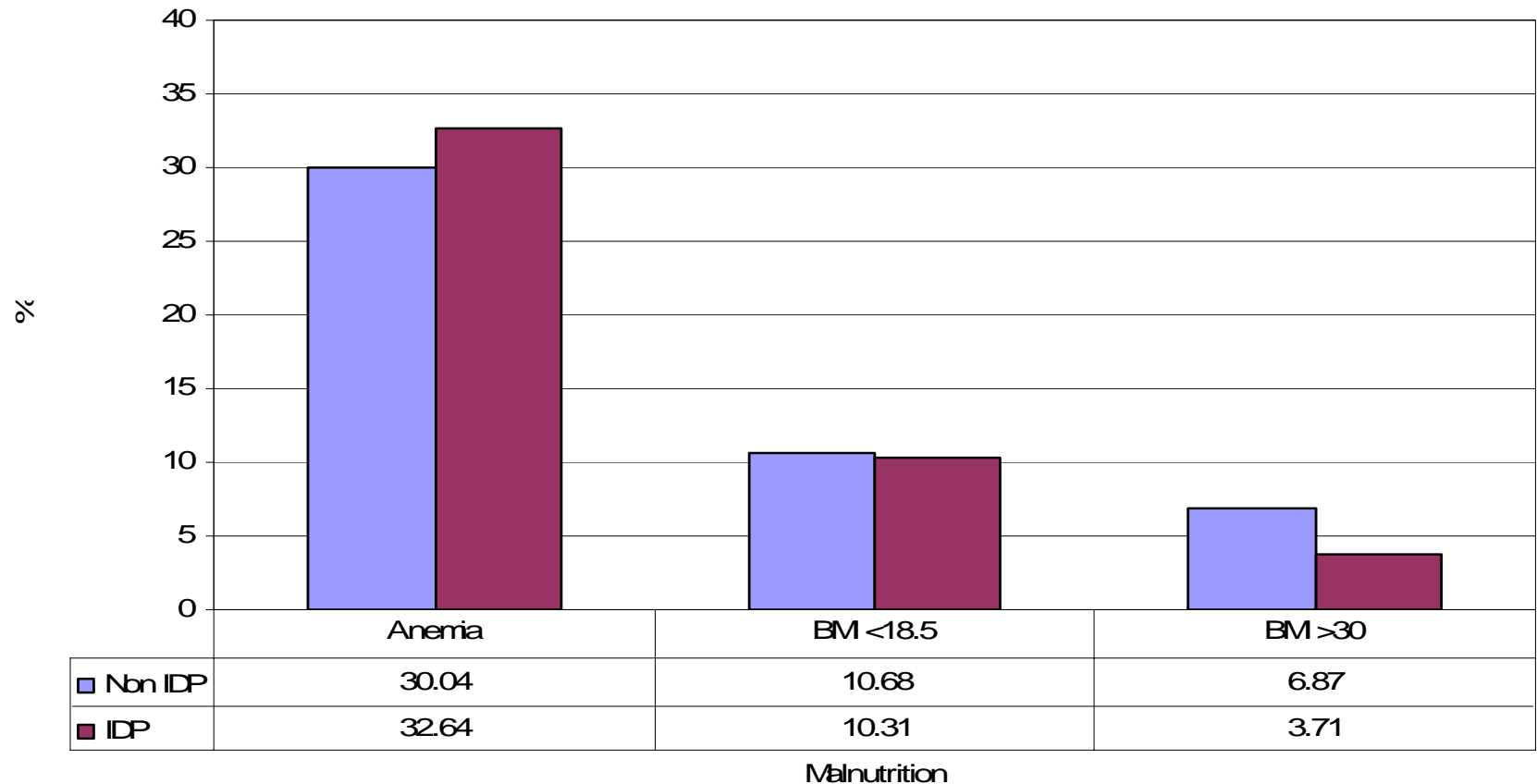
# MALNUTRITION AMONG CHILDREN 6 – 59 MONTHS IDP AND NON-IDP



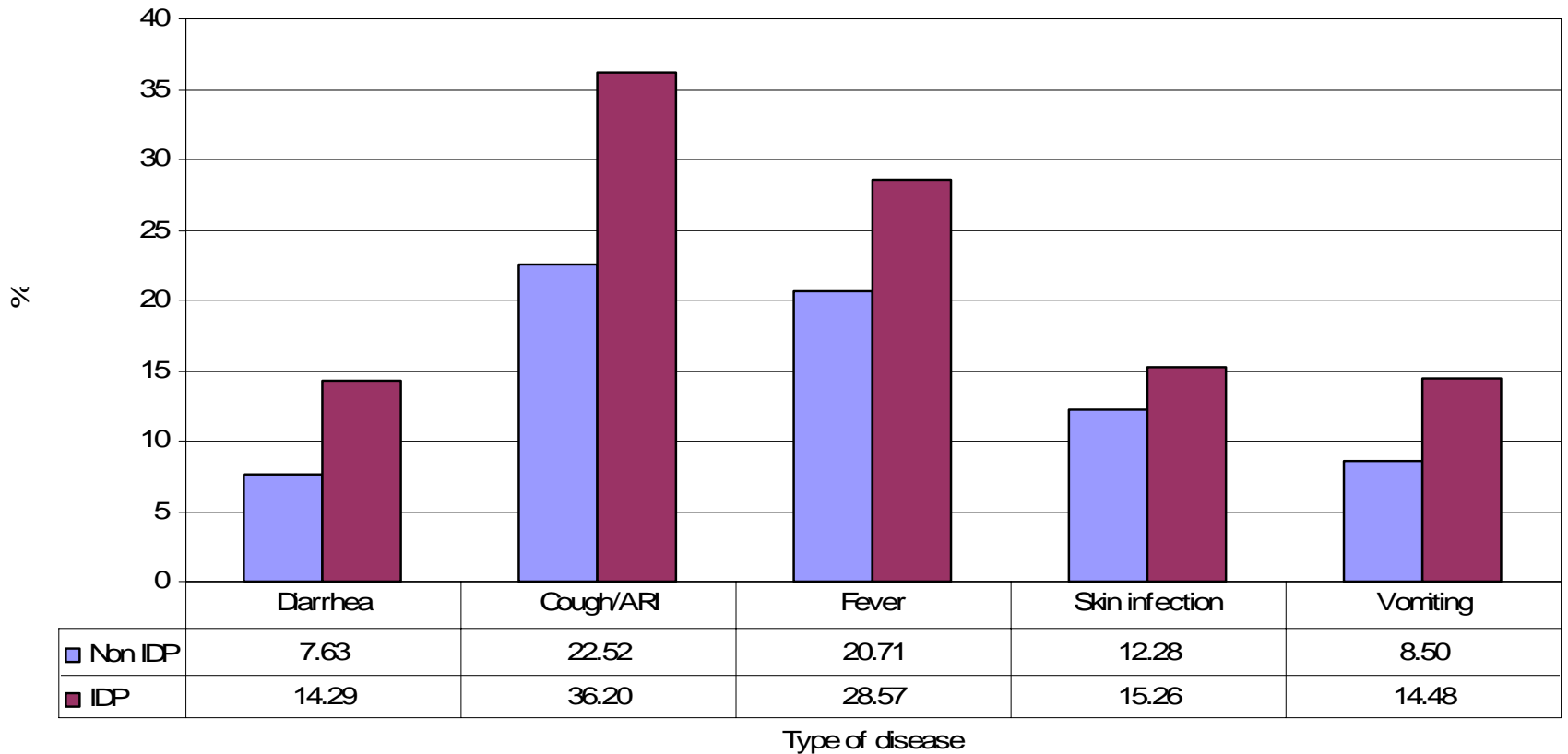
# HEALTH COMPLAINT AMONG CHILDREN 6 – 59 MONTHS IDP AND NON-IDP



# MALNUTRITION AMONG WOMEN AGE 18-45 YEARS IDP AND NON-IDP



# HEALTH COMPLAINT AMONG WOMEN AGE 18-45 YEARS IDP AND NON-IDP



# Summary of Rapid Nutrition Assessment

- **The results gave the evidence that food security and nutrition is a serious public health problem**
- **The reduction of wasting prev. among children under 5 in 2 affected districts between January and March indicated food aid has reached the population at risk**
- **The high prev. of malnutrition both for IDP and Non-IDP needs serious attention not only through macro-nutrient but also micro-nutrient.**



# 4 MONTHS POST TSUNAMI - PRESENTS

- INTERVENTION CONTINUES
- SURVEILLANCE CONTINUES
- A PLAN FOR FUTURE DEVELOPMENT



# LESSONS LEARNED

- **IMPORTANT OF INTEGRATED PACKAGE (FOOD, NUTRITION, DISEASE PREVENTION)**
- **IMMEDIATE RAPID ASSESSMENT**
- **INTEGRATED SURVEILLANCE**
- **IMPLEMENTATION OF INFANT FEEDING PRACTICES IN EMERGENCY**
- **CONTROLLING DONOR FOR FOOD AID**
- **CAPACITY BUILDING**
- **PREPARATION OF FLOATING BUDGET FOR EMERGENCY INCLUDING COMPACT FOOD**



# LESSONS LEARNED

- **IMPROVE COORDINATION AND COMMUNICATION BETWEEN AGENCIES**
- **HEALTH AND NUTRITION PROMOTION POST-DISASTER**
- **COLLABORATE WITH AGRICULTURE, SOCIAL WELFARE AND OTHER LINE MINISTERS FOR COMMUNITY EMPOWERMENT**



# RECOMMENDATION

- **IMPROVE COORDINATION AMONG GOVERNMENT AND AID PARTNERS TO AVOID OVERLAPPING ACTIVITIES**
- **DEVELOP AND STRENGTHEN A PLANNING MECHANISM WITH LOCAL GOVERNMENT TO TRANSFER OWNERSHIP**
- **BUILD UP NATIONAL CAPACITY TO PREEMPT AND DEAL WITH DISASTERS**
- **BUILD A FORUM FOR DISCUSSION ON ACHIEVEMENT, LESSONS LEARNED AND NEW CHALLENGE TO IMPROVE DISASTER MANAGEMENT CAPACITY**
- **DEVELOPMENT OF REGIONAL CENTER FOR DISASTER (STAFFING, MEDICAL EQUIPMENT, FOOD, MICRONUTRIENT SUPPLEMENTS, MEDICINE, GOOD MANAGEMENT SYSTEM FOR DISASTER WITH INVOLVED LINE MINISTRIES)**



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