

14th MANCO Kuching, Sarawak Merdeka Palace Hotel

Food Security and Poverty Alleviation in The Millennium Development Goals: The Role of Muda Irrigation Project

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Presentation Content

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The Millennium Development Goals

- ❑ Goal 1: Eradicate extreme poverty and hunger
- ❑ Goal 2: Achieve universal primary education
- ❑ Goal 3: Promote gender equality and empower women
- ❑ Goal 4: Reduce child mortality
- ❑ Goal 5: Improve maternal health
- ❑ Goal 6: Combat HIV/AIDS, malaria and other diseases
- ❑ Goal 7: Ensure environmental sustainability
- ❑ Goal 8: Develop a Global Partnership for Development

MDG Related to this Conference



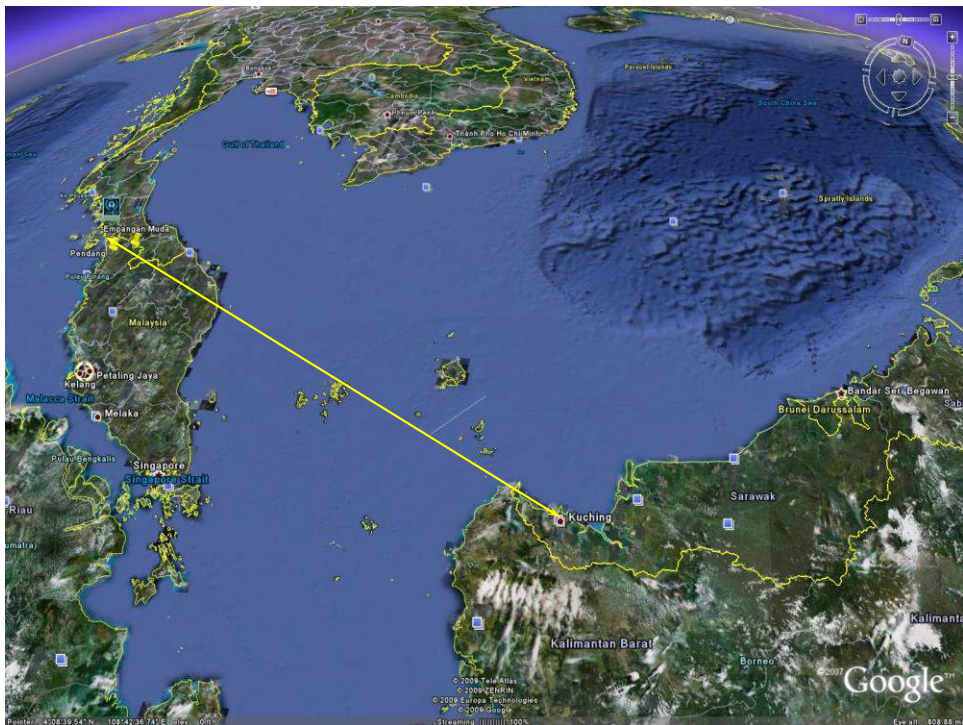
Goal 1:
Eradicate extreme
poverty and hunger

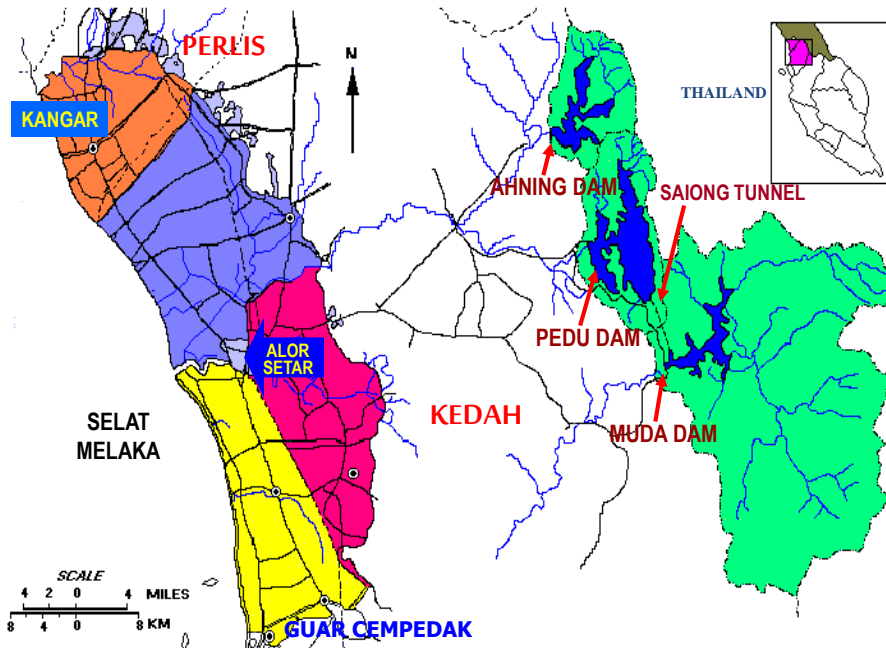


Goal 7:
Ensure environmental
sustainability

Goal 1~ Target: Eradicate extreme poverty and hunger

- ❑ Target 1a: Reduce by half the proportion of people living on less than a dollar a day
- ❑ Target 1b: Achieve full and productive employment and decent work for all, including women and young people
- ❑ Target 1c: Reduce by half the proportion of people who suffer from hunger



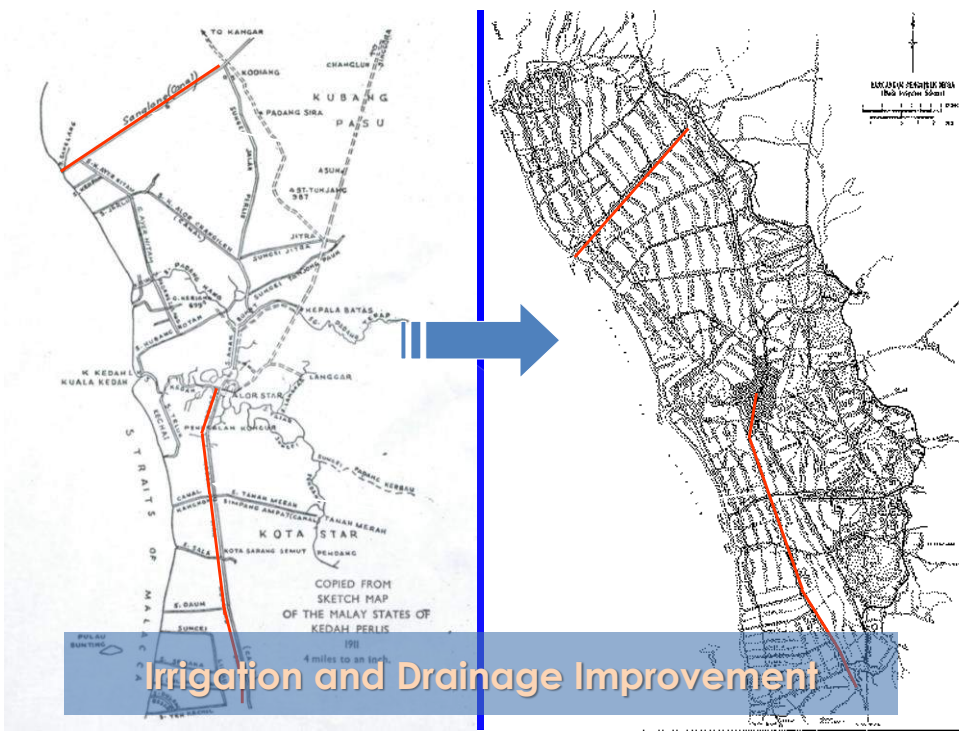


The Muda Area = 96,558 ha





EMPANGAN	TAKUNGAN AIR Juta M ³	KAWASAN TADAHAN Km Persegi	LUAS PERMUKAAN Km Persegi
MUDA	160 (130 RIBU EKAR KAKI)	984	26
PEDU	1,080 (870 RIBU EKAR KAKI)	171	65
AHNING	275 (223 RIBU EKAR KAKI)	122	10
JUMLAH	1,515 (1225 RIBU EKAR KAKI)	1,277	101



Physical Irrigation Infrastructure in The Muda Area

Irrigation System		Drainage System		Field Road System	
a. Dam	3nos.	a. Primary drain	240km	a. Secondary farm road	770km
b. Primary canal	146km	b. Secondary drain	865km	b. Tertiary farm road	868km
c. Secondary canal	965km	c. Tertiary drain	562km		
d. Tertiary canal	764km				

Comparison of Irrigation Intensity

MADA - Muda I (72%)	-	11 m / ha
- Muda II (28%)	-	30 m / ha
KADA	-	24 m / ha
Barat Laut Selangor	-	43 m / ha
Pulau Pinang	-	39 m / ha
Krian	-	31 m / ha
Sg. Manik	-	40 m / ha
Trans Perak	-	36 m / ha
Kemasin Semarak	-	33 m / ha
Besut	-	48 m / ha
Jepun / Taiwan	-	100 m / ha

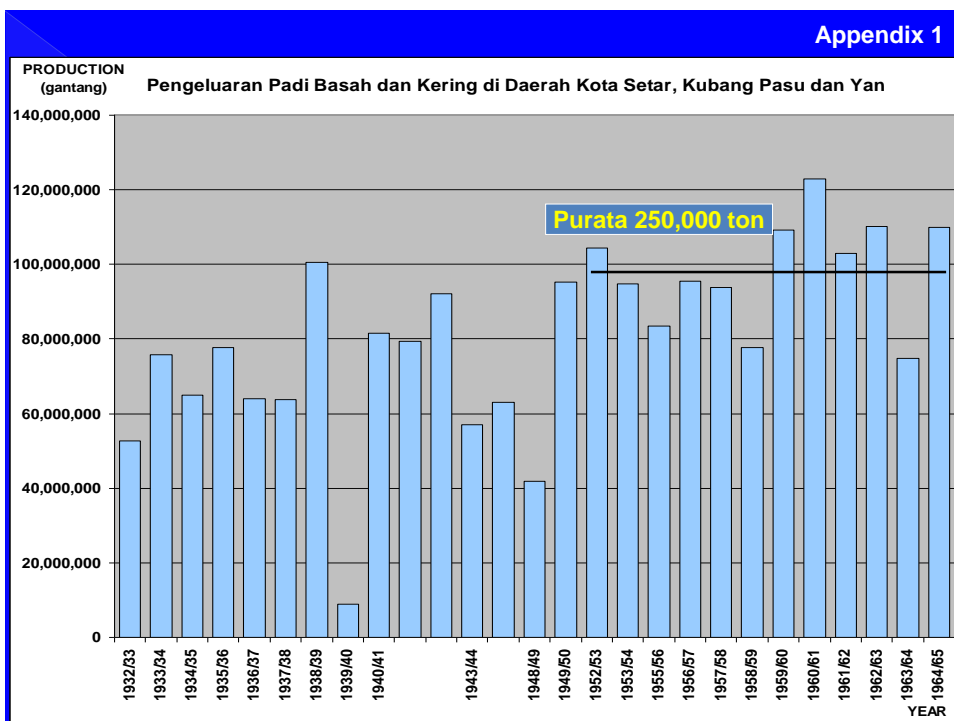


Table 3 : Paddy Yield (ton/ha) in the Muda Area (1970 -2008)

Year	Average (ton/ha)		Total Area Planted (Ha)	Total Production (ton)	Income Generation (RM)
	Main Season	Off Season			
Before 1970	3.286	-	479,275	1,568,859	418,257,809.40
1970 – 1975	3.843	4.049	963,516	3,782,598	998,984,131.80
1976 – 1980	4.254	4.486	834,610	3,632,824	959,428,818.40
1981 – 1985	4.252	3.619	897,452	3,547,451	1,759,890,441.10
1986 – 1990	4.573	3.511	940,540	3,815,556	1,892,897,331.60
1991 – 1995	5.274	4.201	956,453	4,538,522	2,251,560,764.20
1996 – 2000	4.764	4.721	963,329	4,568,303	2,512,566,650.00
2001 – 2005	4.941	5.660	963,473	5,078,512	2,793,181,600.00
2006 – 2008 (5 seasons)	5.441	5.993	482,483	2,768,585	2,076,438,750.00

(Source: Planning and ICT Division, MADA) Note: Interval of 5 years was used;* Estimated Production until Season 1/2008; Unit Price of Paddy/ton, 1970-80 RM264.10, 1981-95 RM496.10, 1996-2005 RM550, 2006 RM650, 2008 RM750

**PURATA HASIL (KG/HA) BAGI KAWASAN MUDA
TAHUN 2000 - 2007**

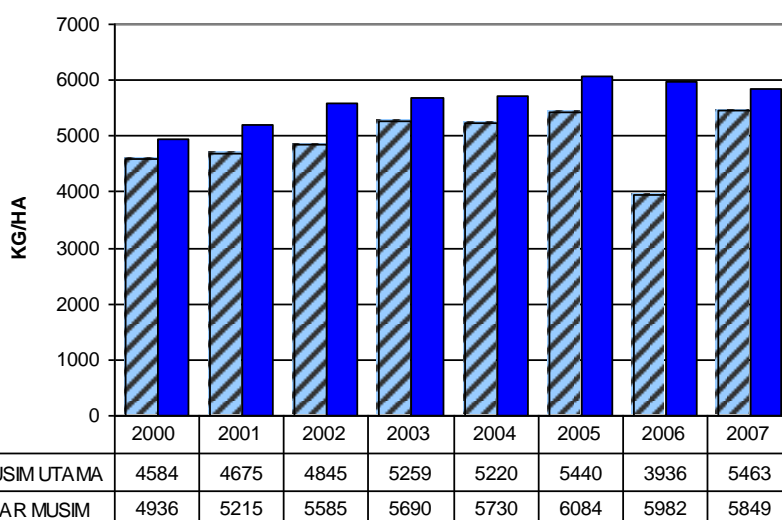


Table 4 : MADA Contribution to Paddy Parcel Area and Production Compare to Other Granary

GRANARY AREA	PARCEL AREA (ha)	% AREA	CONTRIBUTION TO NATION PRODUCTION (TON AND %)					
			2005	%	2006	%	2007	%
MADA	96,558	23.22	880,379	39.01	750,552	35.22	861,032	37.27
KADA	32,167	7.74	172,332	7.64	180,976	8.49	188,645	8.16
PKSM	27,829	6.69	161,016	7.13	160,432	7.53	175,482	7.60
PBLS	18,482	4.45	175,784	7.79	173,376	8.14	184,115	7.97
P.P.P.B.P.PINANG	10,305	2.48	86,315	3.82	97,248	4.56	100,041	4.33
SBG. PERAK	8,529	2.05	54,857	2.43	43,709	2.05	47,258	2.05
KETARA	5,156	1.24	40,733	1.80	37,371	1.75	42,707	1.85
KEM. SEMERAK	5,220	1.26	15,860	0.70	16,809	0.79	13,651	0.59
TOTAL GRANARY	204,246	49.12	1,587,276	70.33	1,460,473	68.53	1,612,931	69.81
TOTAL – NON GRANARY	211,545	50.88	669,741	29.67	670,628	31.47	697,497	30.19
MALAYSIA	415,791	100.00	2,257,017	100.00	2,131,101	100.00	2,310,428	100.00

(Source: Department of Agriculture)

Table 6 : Allocation for MADA under the Food Security Policy Programme (2008 - 2010)

No	Program	2008 (RM Million)	2009 (RM Million)	2010 (RM Million)	Total (RM Million)
1	Maintenance of irrigation and drainage infrastructure	23.00	21.86	31.00	75.86
2	Land Leveling	0	10.00	15.00	25.00
3	Agriculture Input (Lime)	5.00	3.50	3.50	12.00
4	NPK Fertilizer	39.10	78.20	78.20	195.50
5	Pest and Disease Control	19.30	38.60	38.60	96.5
6	Farm Mechanization	17.76	27.472	20.292	65.524
7	Development of minor irrigation and drainage infrastructure	6.00	64.00	90.00	160.00
TOTAL		110.16	243.632	276.592	630.384

Results thus far for Season 2/2008 (as on 11 February 2009)

- ❑ Planted area = 96,523.7ha (99.96%)
- ❑ Flowering = 91,504.5ha (94.8%)
- ❑ Ripening = 74,325.4ha (77.0%)
- ❑ Harvested = 59,109.1ha (61.2%)
- ❑ **Estimated average yield = 6 ton/ha**
- ❑ **Avg. yield for Season 2/2007 = 5.42 ton/ha**

Table 7 : Impact On The Target Groups

Impact	Before Project	After Project
Average yield (ton/ha)	3.2 (1969)	5.656 (2007)
Total Production (ton)	316,992 (1969)	1,092,034 (2007)
Value of production (RM)	85 million	710 million
Cropping Intensity	100%	200%
Labor (man-hours)	615 (Manual Transplanting)	129 (Direct Seeding)
Net household income (RM/yr)	1,092.00	15,391.00
Net household income (RM/mth)	91.00	1,282
Monthly per capita income (RM)	18.20	256.00
% Poverty Level Poor	72	4.3
% Hard Core Poor	5	1

Concluding Remarks

- ❑ Muda Irrigation Project contributes to the nation food security by providing nearly 40% of the staple food supply.
- ❑ It helps to alleviate poverty in the region once a “poverty rich” area prior to the implementation of the irrigation project which enables double cropping of paddy to generate and improve income to the farmers.

Thank you