

Meeting **World Food Needs** with **GM Rice?**

Rice Sector in Bangladesh: What the Future Looks Like?

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- Introduction
- Production, Consumption and Trade
- Policies (Agricultural, Food and Biotechnology)
- Key Challenges of the Rice Sector
- Conclusions

# Bangladesh at a Glance Geographical Location

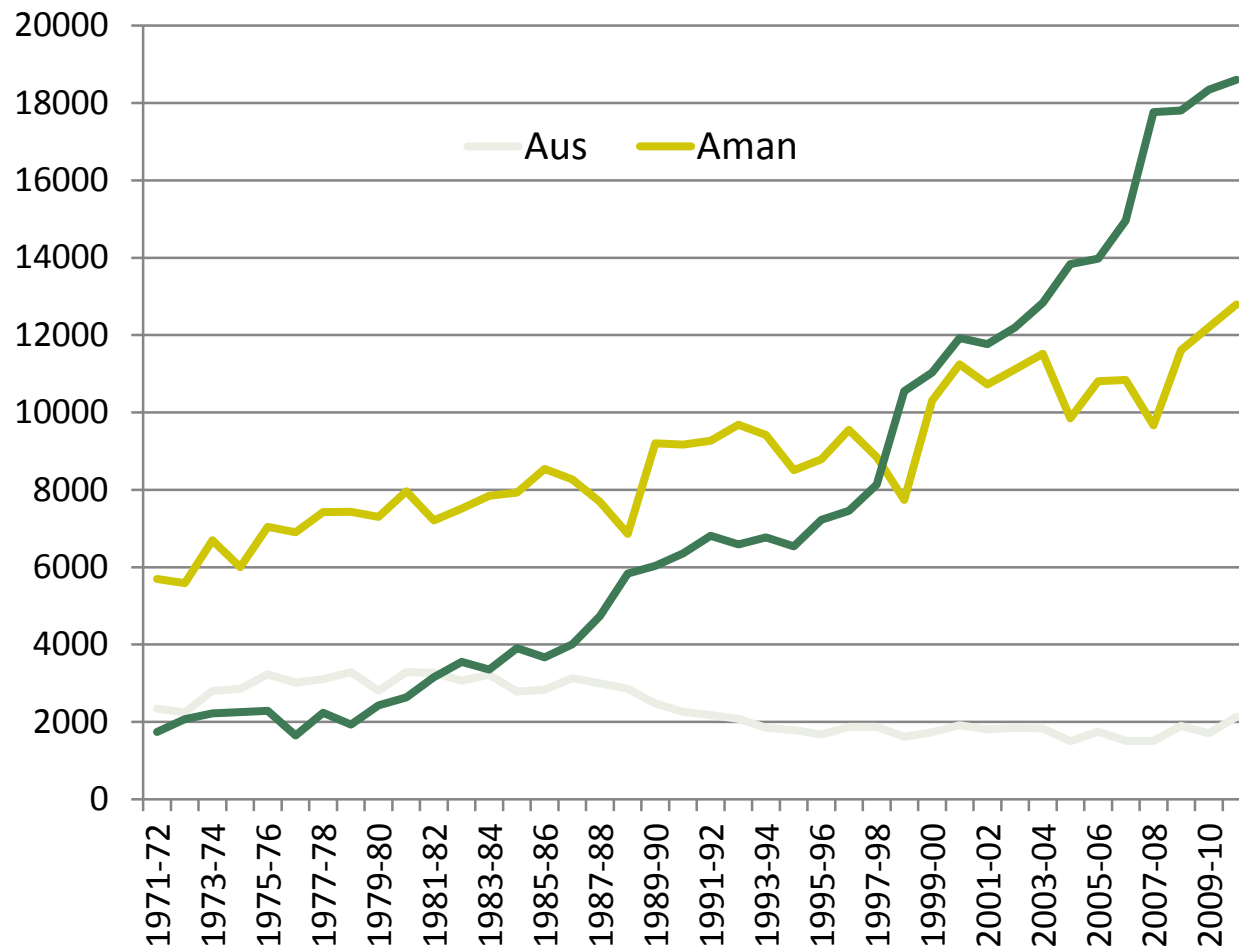


Bangladesh

# Introduction

- Rice is the major staple, food security means rice security
- It provides income, employment and food directly or indirectly for more than 70% of the peoples
- Sector is a major source of calorie intakes
- From rice deficit to almost self sufficient for some of the years in last decade
- Have three rice seasons (Aus, Aman and Boro)
- Have both irrigated and rainfed rice

# Rice production trends in Bangladesh



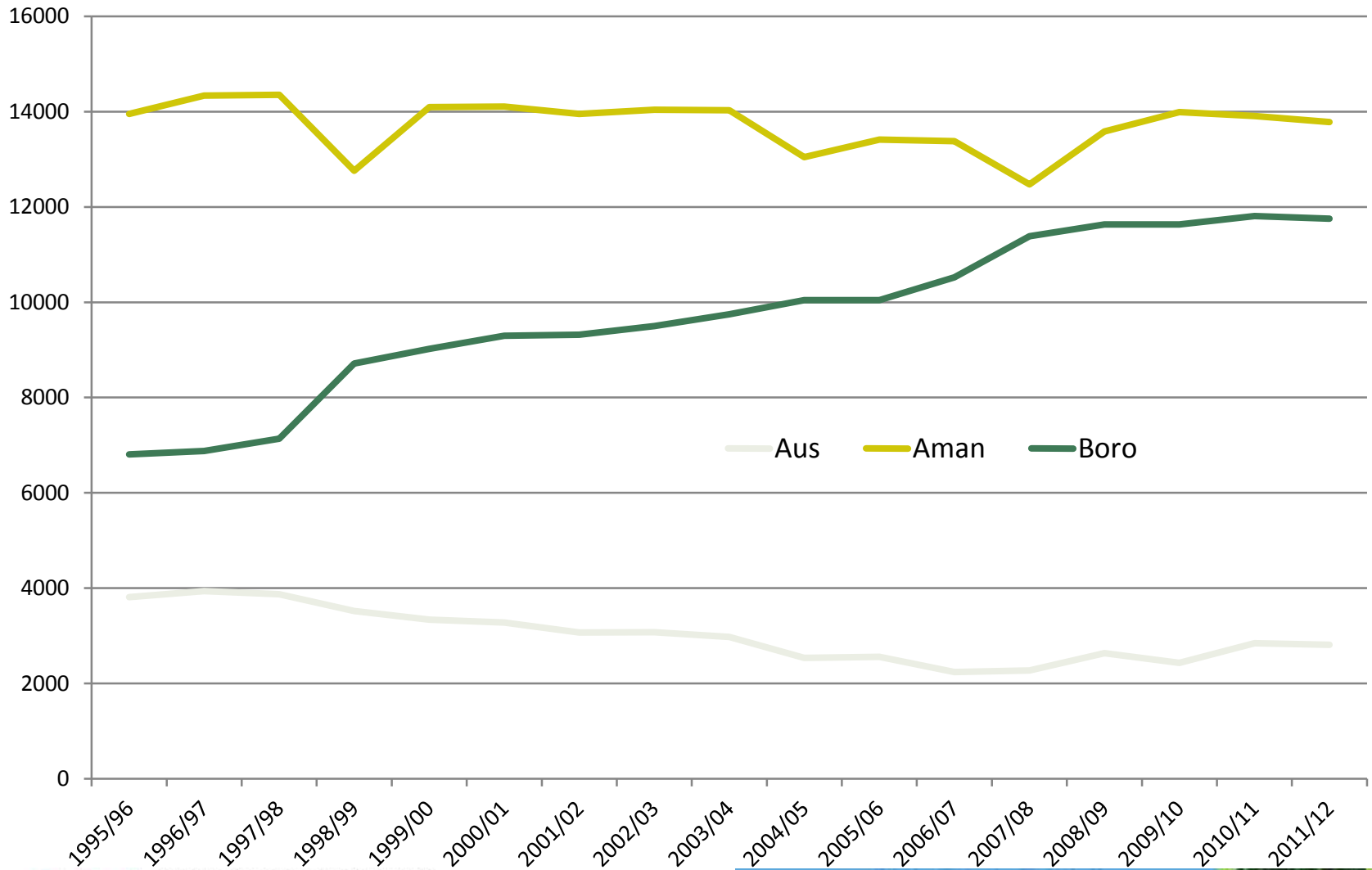
Boro Rice production trends in Bangladesh

## Rice Production Growth (%)

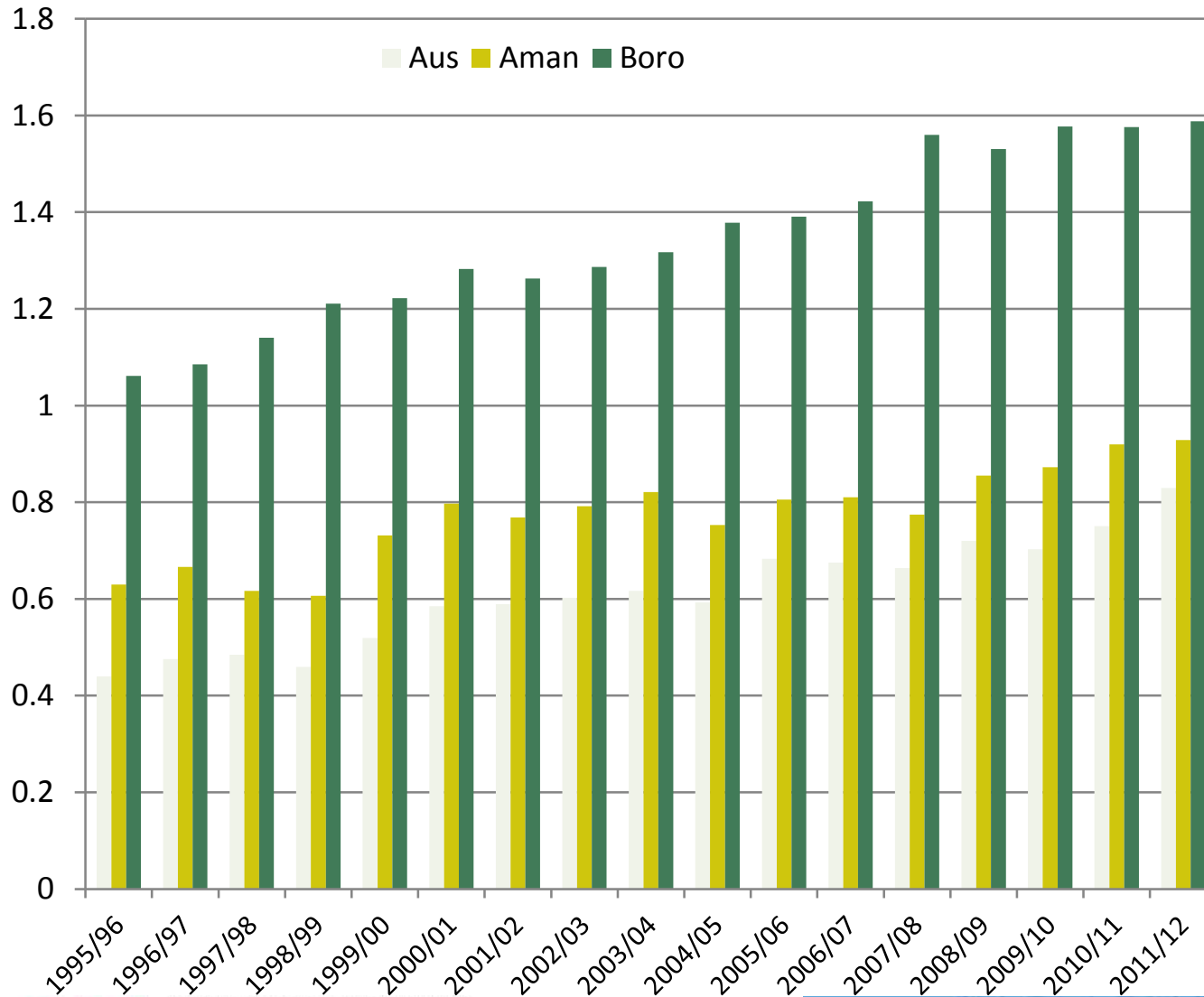
Rice varieties	Production		Growth rate (%)
	1985/86	2007/08	
Aus	2828	2215	-1.06
Aman	8540	13045	1.8
Boro	3670	16945	6.9
Total	15038	32205	3.3

**Source:** Chowdhury (2010)

# Acreege trends of different varieties (in acres)



# Yield trends of different rice (ton/acre)



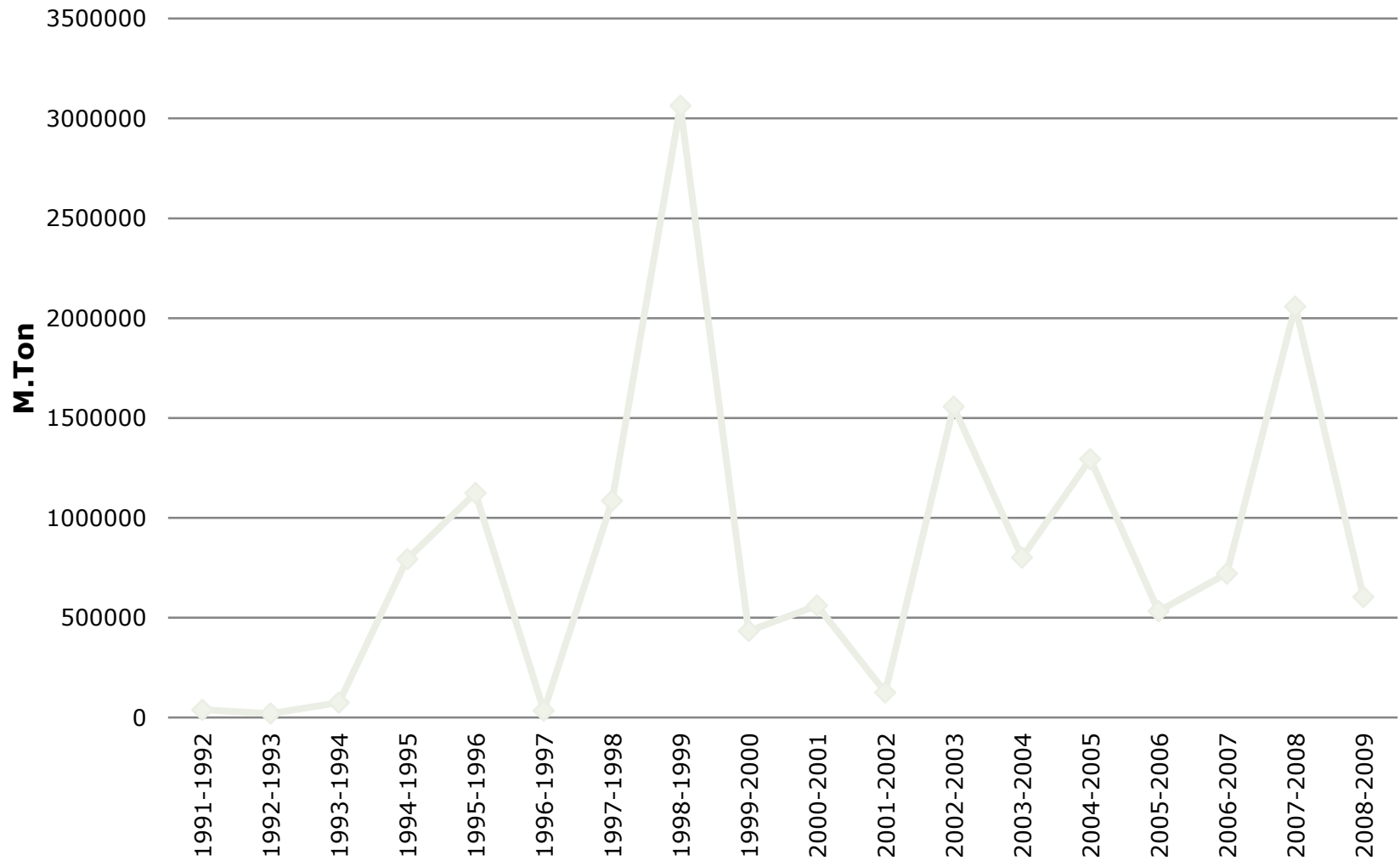
Yield trends show that Boro yield is much higher than Aus and Aman and increasing over time



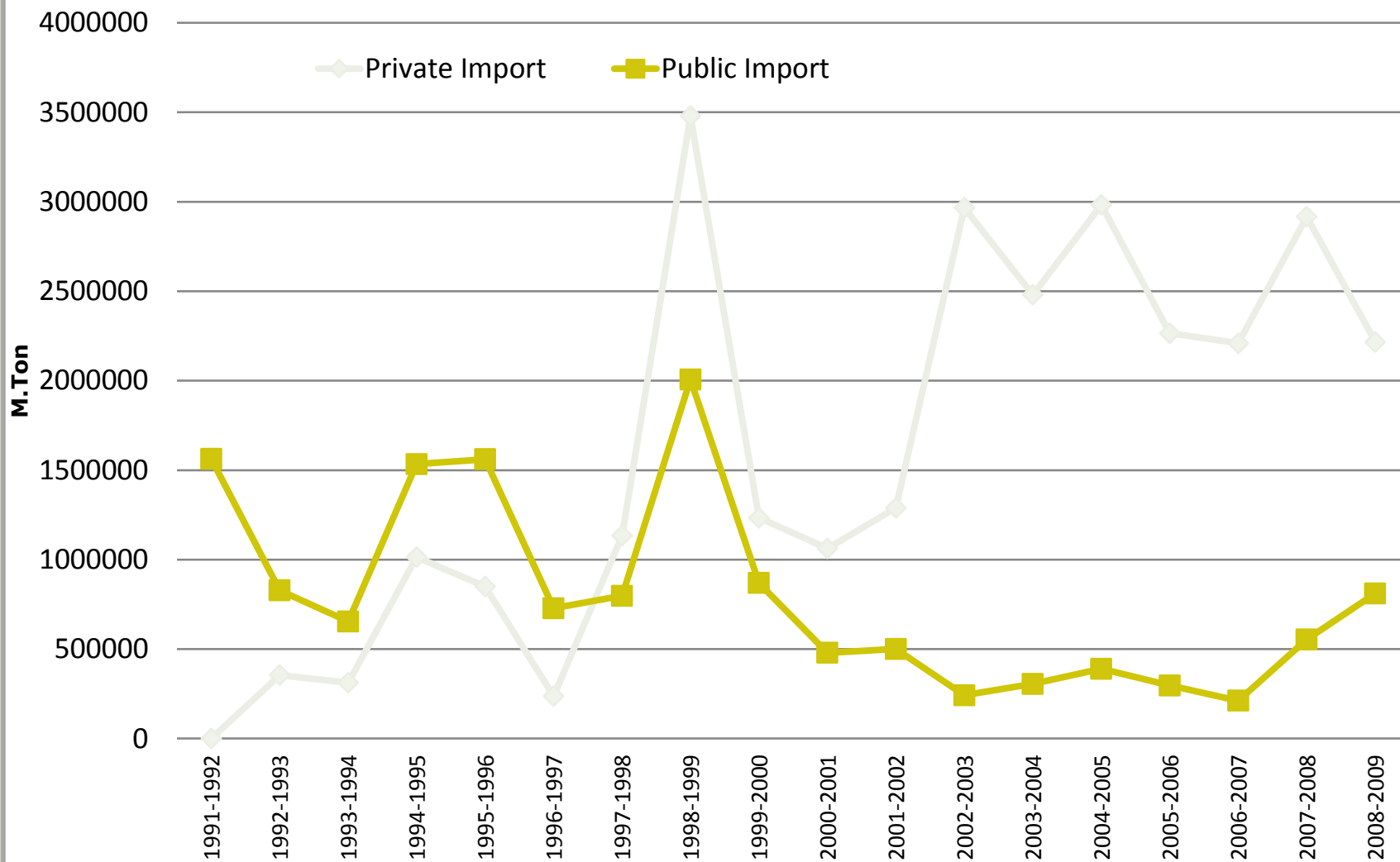
## Production and consumption gap (in `000 mtons)

Items	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12
Mid-Year Population (in millions)	140,0	142,0	144,0	145,9	147,9	149,7	151,6	153,5
Net Foodgrain Requirement (@489 gm/day/capita)	24988	25345	25702	26041	26398	26719	27058	27397
Gross Foodgrain Production	26133	27266	28055	29775	32166	33158	34513	34792
Net Foodgrain Production ( 88% of Gross Production)	22997	23994	24688	26202	28306	29179	30371	30617
Foodgrain Deficit/Surplus	1991	1351	1013	(161)	(1908)	(2460)	(3313)	(3220)

## Total rice import trend (m ton)



## Private and public imports of rice (m ton)

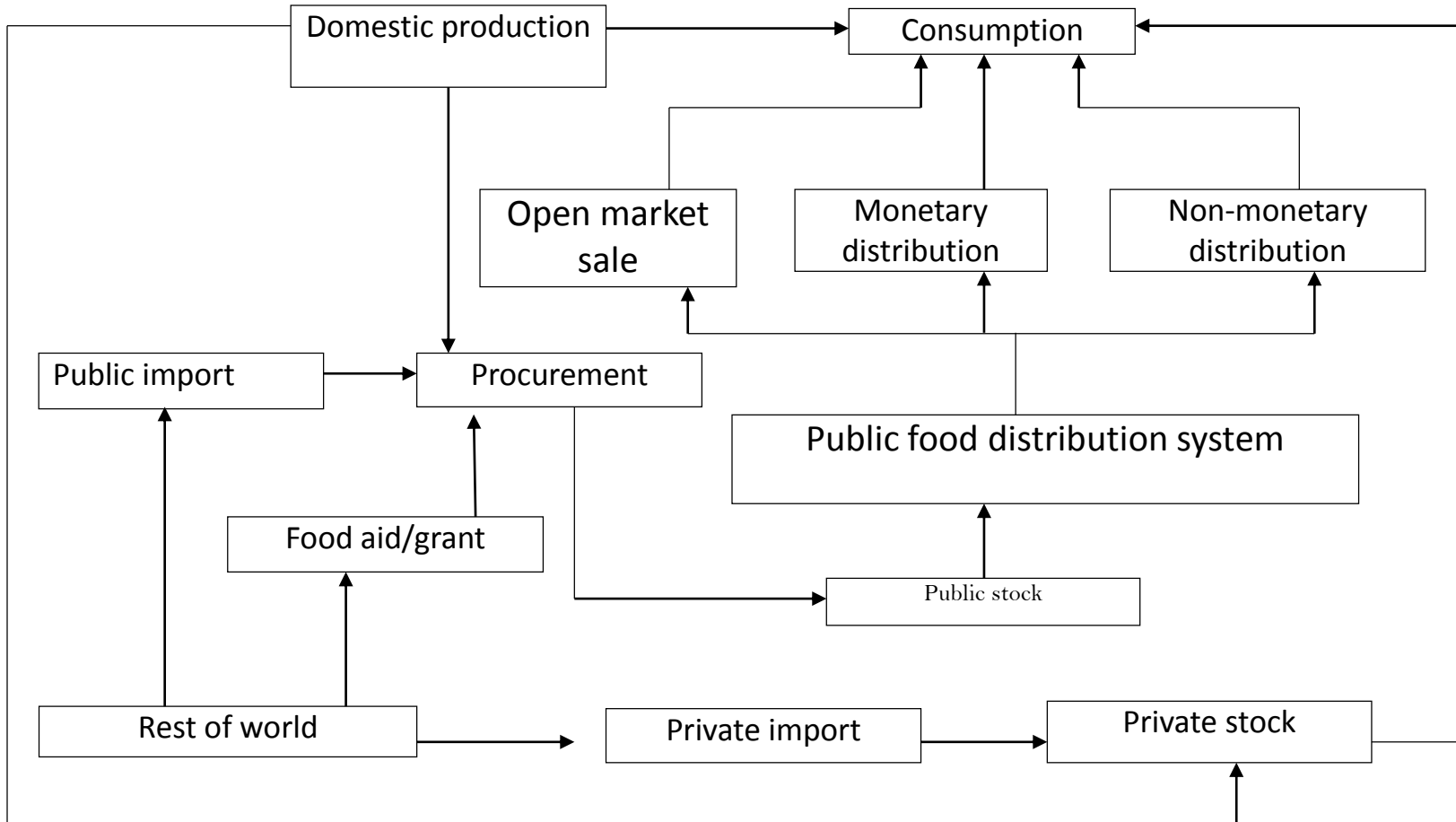


## Table Private and public imports of rice

Year	% of imports to total	
	Private imports	Public imports
1997/98 to 1999/2000	92.4	7.6
2000/01 to 2003/04	96.8	3.2
2004/05 to 2007/08	95.9	4.1

**Source:** Chowdhury (2010)

# Rice market



## Rice Import Policy in Bangladesh (CIP?)

- 1) Tariff varies, some years almost zero
- 2) Private imports (Imports from India) contributed a lot in 1998 and 2002 when there were production shocks but during the price hikes in 2007-08 it did not work because of the export restrictions of India
- 3) Rice import dependency (import/availability) is 1.4% (average 07/08 – 09/10) BUT there is a target to 0% by 2015 (in CIP)

## Key challenges in the sector

- Climate changes (some programs for new varietal development)
- Yield gap
- Post-harvest losses

## State of GM rice (food) policies

Still it is in the experimental lab!

# Thank you!!