

Milk Vita –realities and reaching out to dreams of millions

- ❑ Milk Vita & its activities
- ❑ Dairy marketing performances
- ❑ Nutrition security, socio-economic & public health performances of smallholder dairying
- ❑ Challenges ahead

Milk Vita or Bangladesh Milk Producers` Cooperative Union Ltd. (BMPCUL) established in 1973

FAO & DANIDA recommended following the success of AMUL Anand Milk Federation Union Ltd., India in 1973

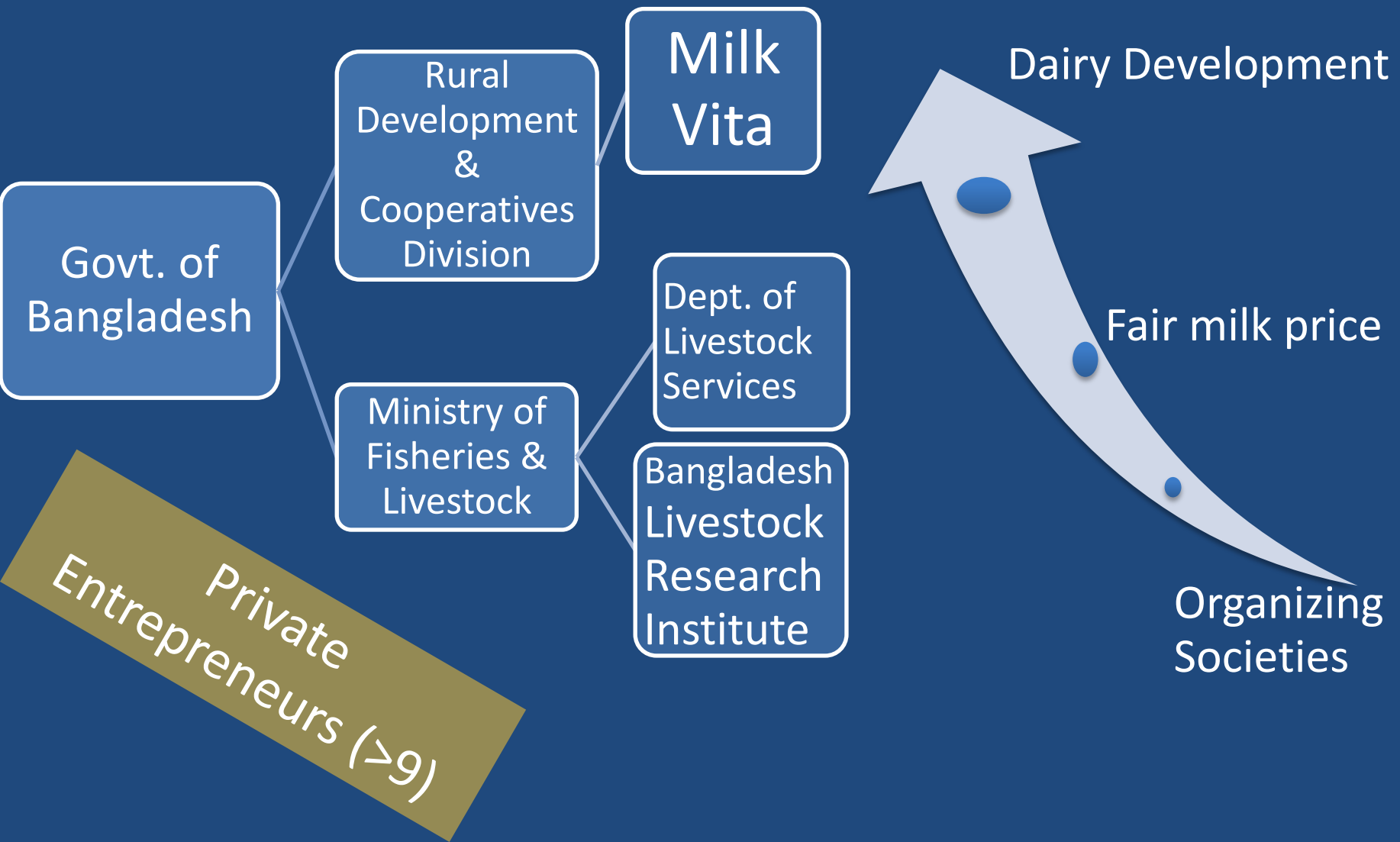
State patronized Eastern Milk Producers` Co-operative Union Ltd. in 1965

Private Eastern Milk Products Ltd. in 1952

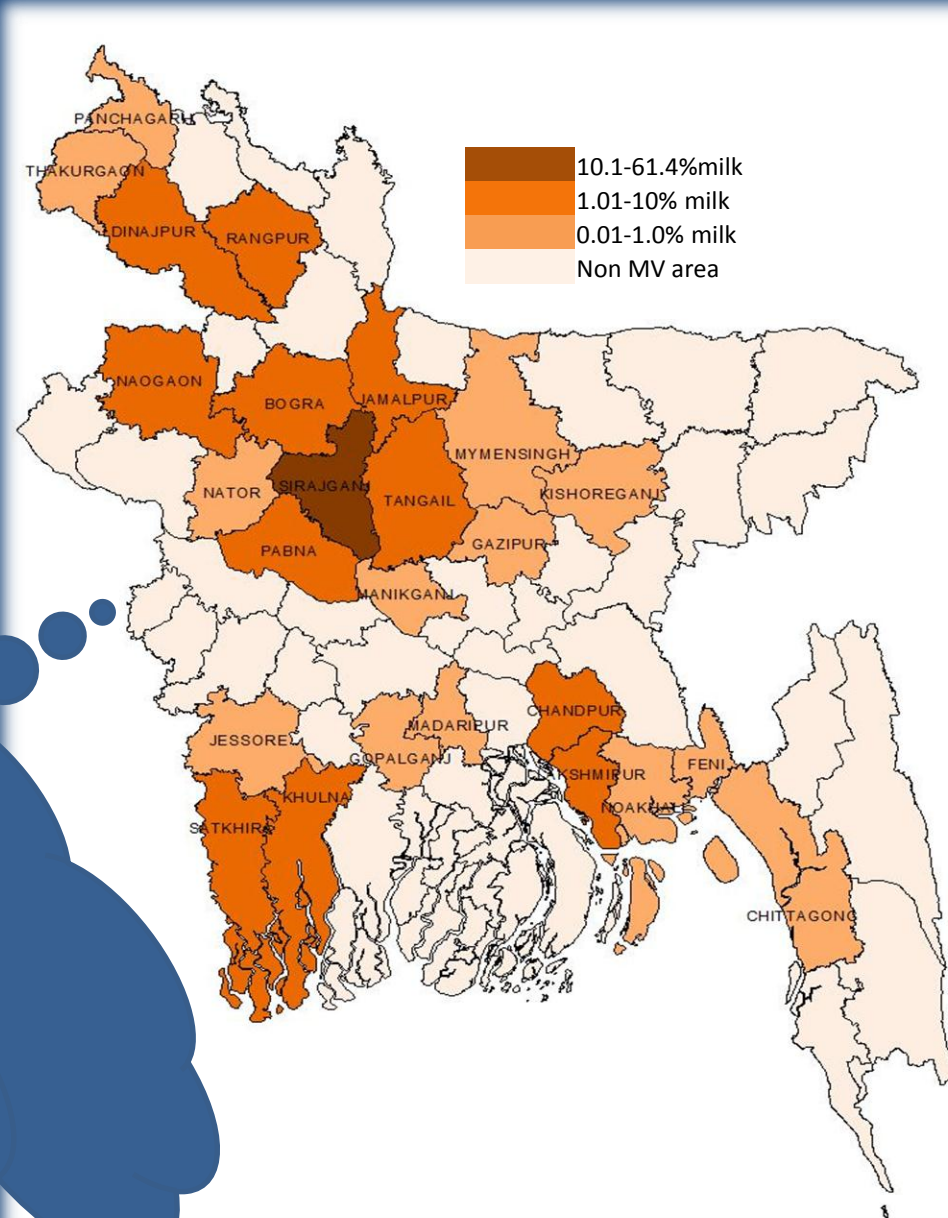
Pioneered by M. M. Rahman in 1946

ASTO Dairy of the National Co-operative Marketing Society of the then East Pakistan

Milk Vita-a public shared dairy cooperative organization & its vision (www.milkvita.org)



Districts having milk shed areas of Milk Vita



- Farmer- 97.6×10^3
- Societies - 2306
- Milk producing areas- 33

Marketing share of Milk Vita & Private Entrepreneurs

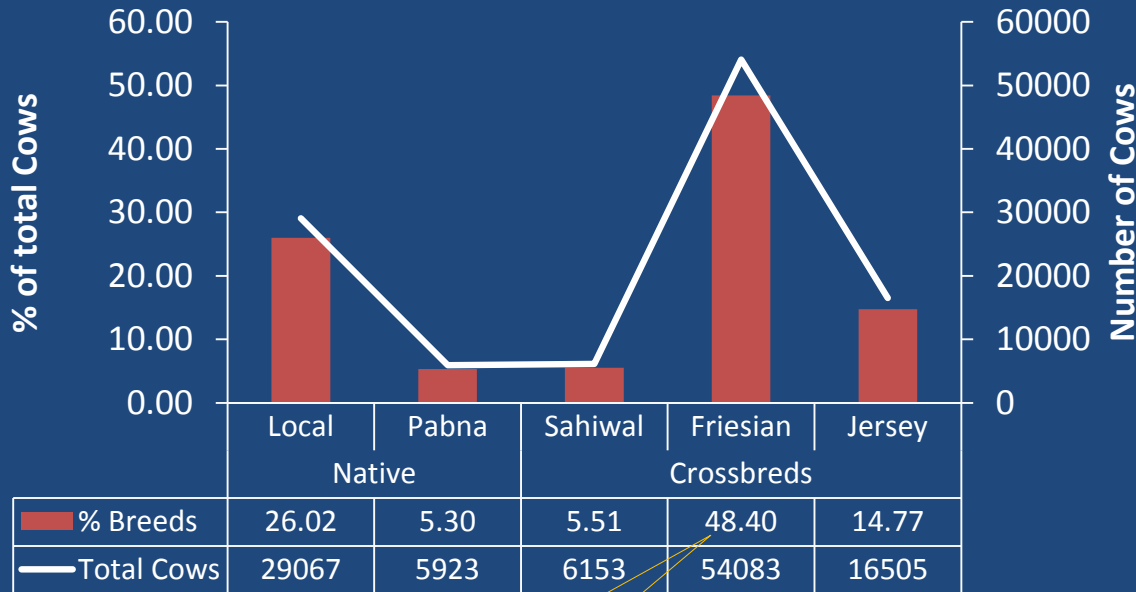
Milk & Other products	National Total	Dairy entrepreneurs		% Share of the total	
		Milk Vita	Privates	Milk Vita	Privates
L.Milk Daily x10 ³ Kg	399	184	215	46.0	54.0
Dairy products (xTon/year)					
Pw. milk	585	385	200	65.8	34.2
Fl. milk	912	270	642	29.6	70.4
I. Cream	19475	2190	17285	11.2	88.8
Butter	1004	730	274	72.7	27.3
Butter oil	865	548	317	63.4	36.6
Curd	1865	291	1574	15.6	84.4

Private entrepreneurs together take lead in liquid milk, flav. Milk, Ice cream & curd production

Milk Vita takes lead in powder milk, butter & butter oil production

Cattle genotypes in milk supported areas

Type of genotypes

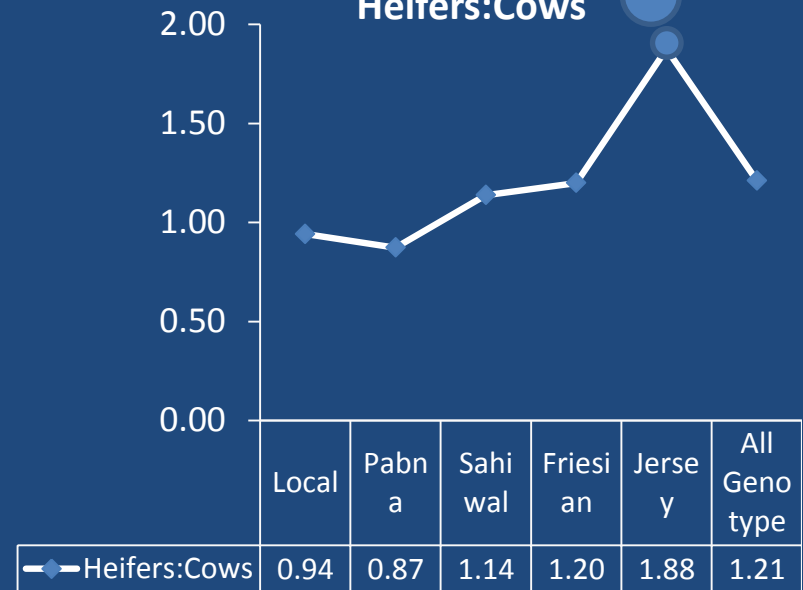


Friesian crosses are 48.4%

➤ Natives are being replaced by Non-natives

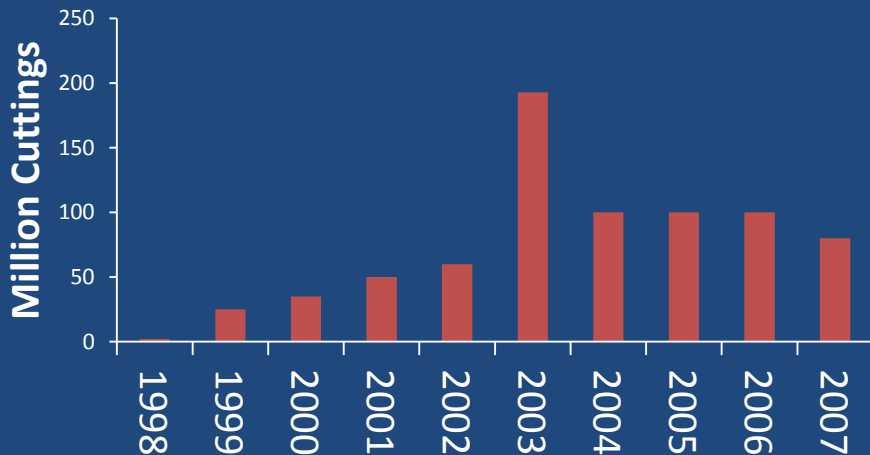
➤ Jersey cross replacers have topped others

Heifers:Cows

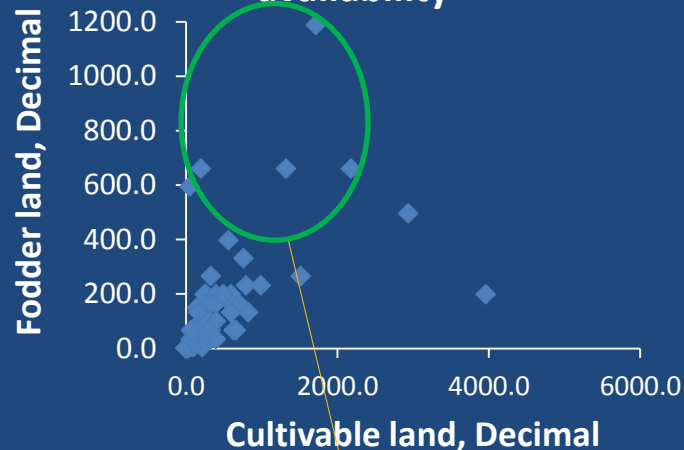


Input support-**Fodder seeds**

Distribution of Napier cuttings (Millions)



Fodder cultivation with land availability



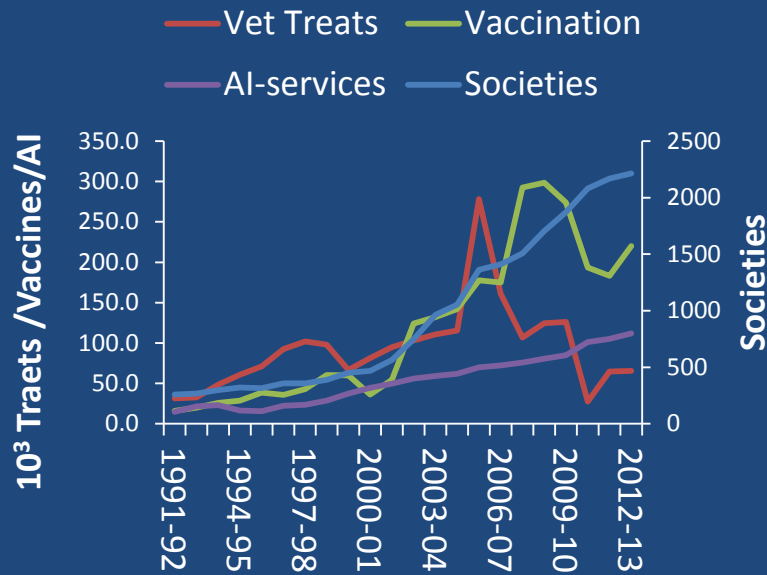
i) Milk Vita sourced HYV Napier from BLRI & supplied them to farmers

ii) BLRI conserve, screen & improve fodder for introduction into cropping system of different regions

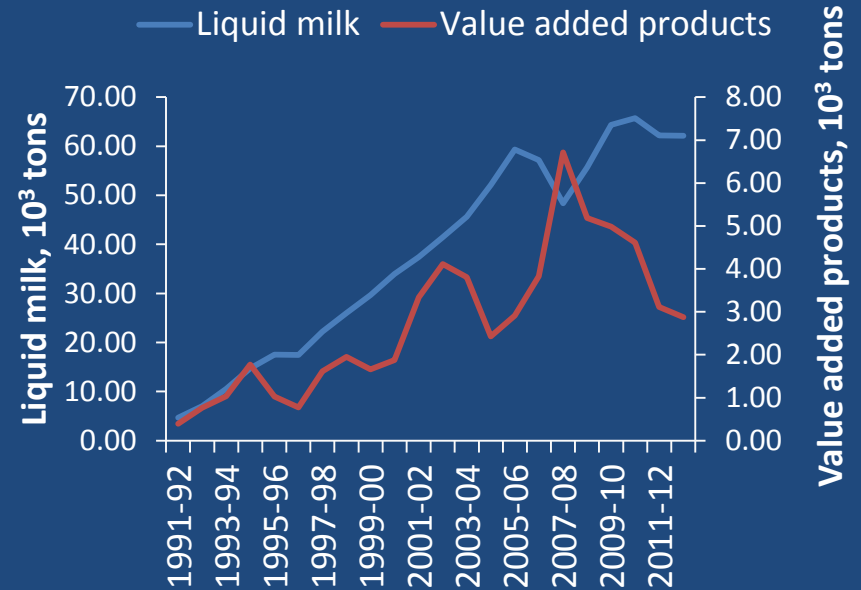
Even a land poor farmer cultivate fodder using leased in land

Input supports and milk & product marketing

Trend in society formation and input support



Trend in milk & product marketing



Society number, AI & Vaccination



Vet treatment



$$\text{Milk} = 2.43 + 3.09 * \text{year}$$

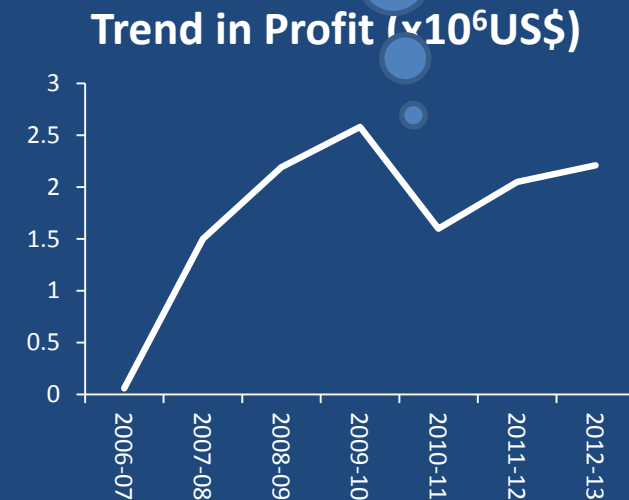


Products fall recently

Balance sheet (x10⁶ US\$)

Years	Income	Expenditure	Profit
2006-07	33.6	33.6	0.06
2007-08	33.6	32.0	1.50
2008-09	46.5	44.3	2.19
2009-10	53.4	50.8	2.58
2010-11	50.4	48.8	1.60
2011-12	51.6	49.6	2.05
2012-13	58.5	56.3	2.21

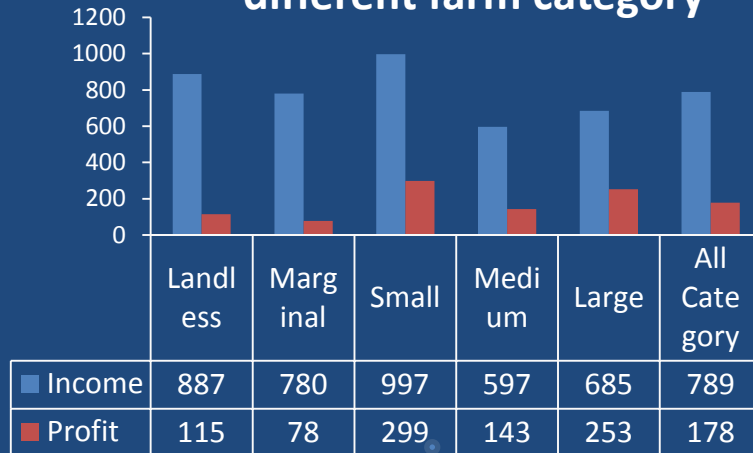
Financially profitable;
@ about
4.0%



Socio economic performance indicators of dairying

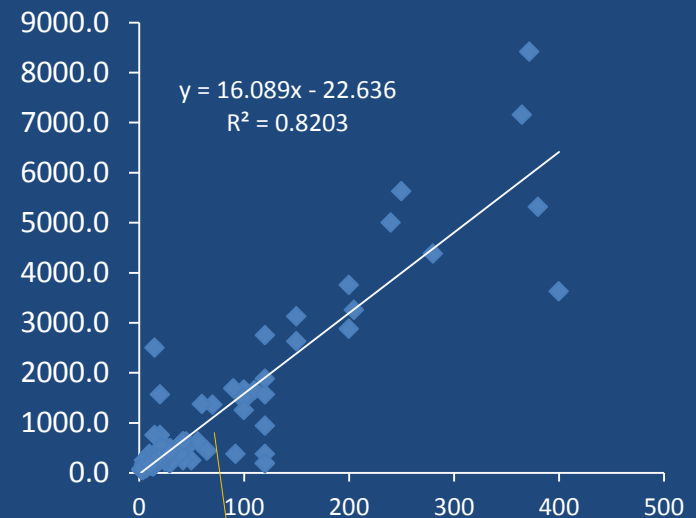
(a) -a source of income even for a landless farmer

Monthly income & profit (US\$) of different farm category



Monthly profit varied from US\$ 78 -299/farm

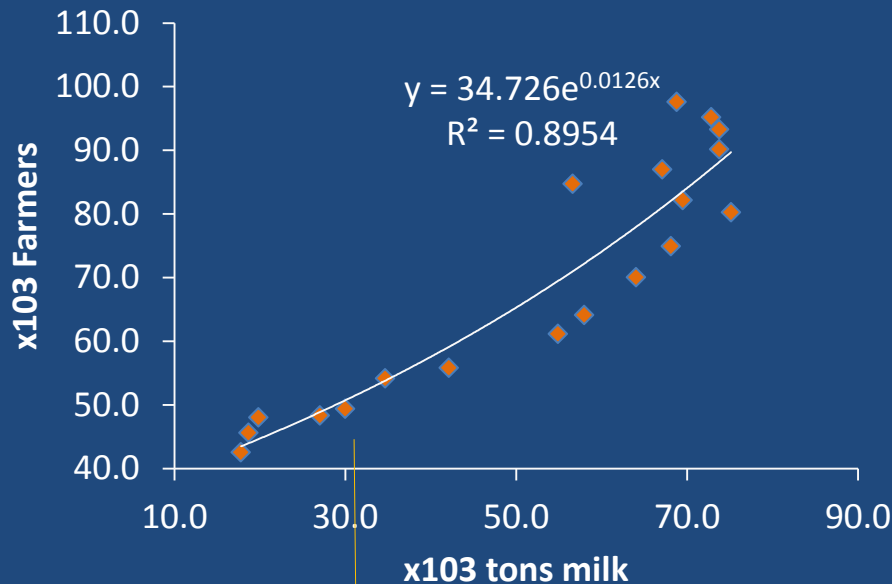
Monthly income (US\$) from daily milk production (Litre)



Profit depends on daily milk yield of a farm
($Y = 16.09 * \text{Lit. Milk} - 22.64$)

(b) -a source of livelihood & employment

Relation between milk production (Tonsx103) & member (103)



About 67.8% of annual income of almost 35 families comes from 1.0 ton of liquid milk production

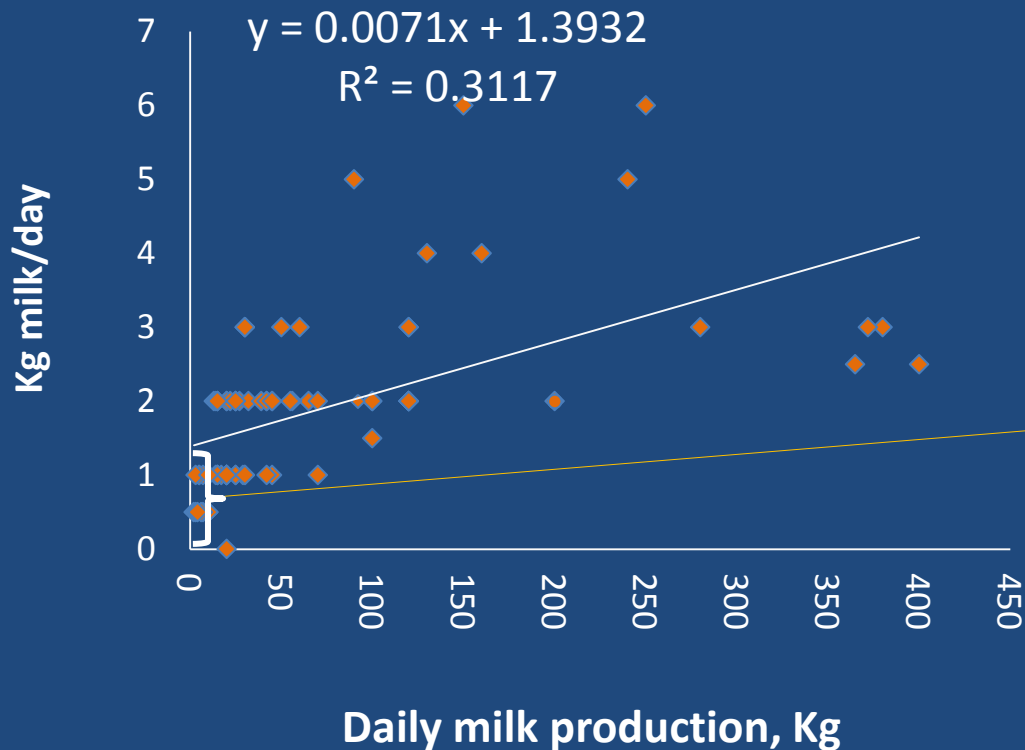
Daily litres milk & employment (Man days)



A dairy farm having average 28 total cattle including 11.0 milking cows hire 1.94 additional man days daily.

©—a source of family nutrition

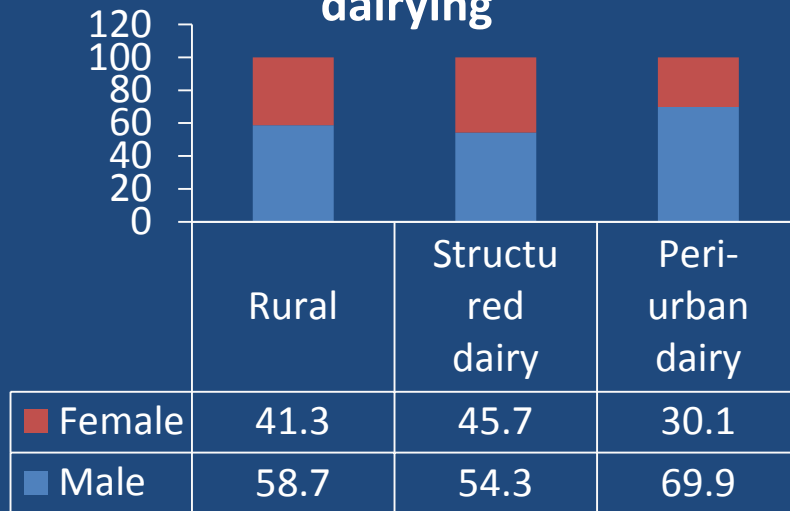
Daily milk production and family milk intake



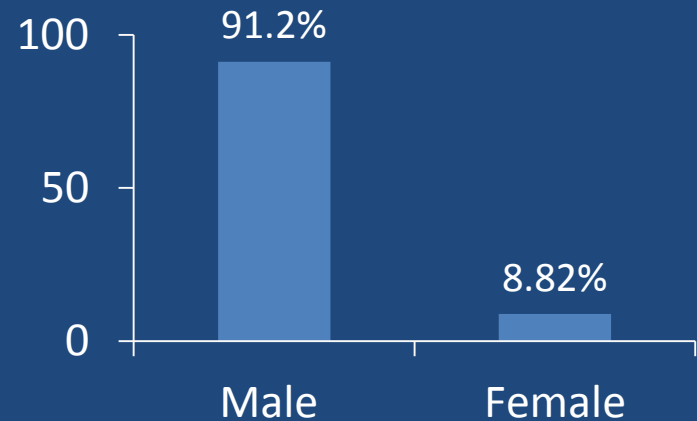
Av. 1.39 Kg
milk/day is
available to a
farm family

(d)- a resource for women empowerment

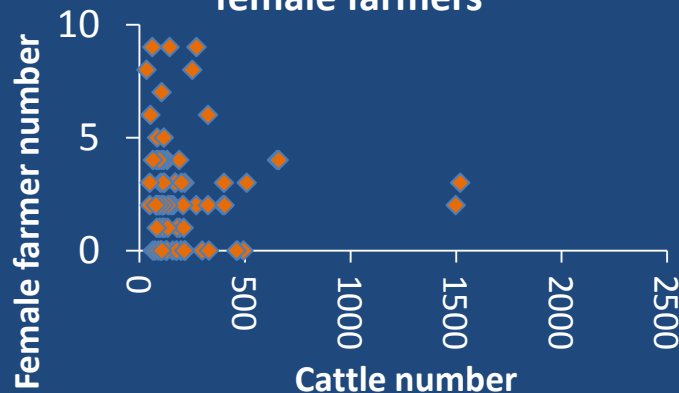
Share (%) of family labour in dairying



Gender share in dairy farming



Cattle number distribution to female farmers



Females share 30% - 46% of dairy activities



8.82% is the owner of dairy farm



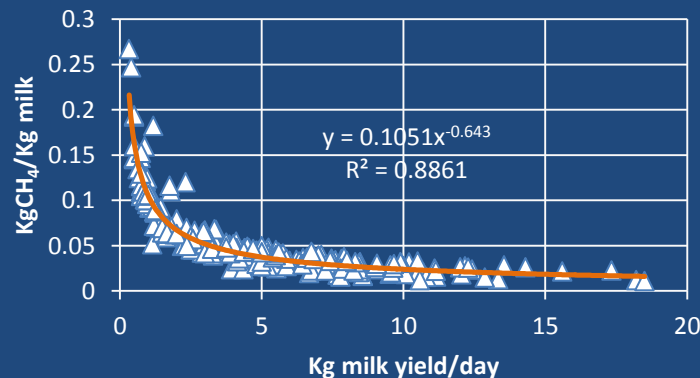
Keeps low number of animal/farm

Dairying-a bio-enterprise for pollution control

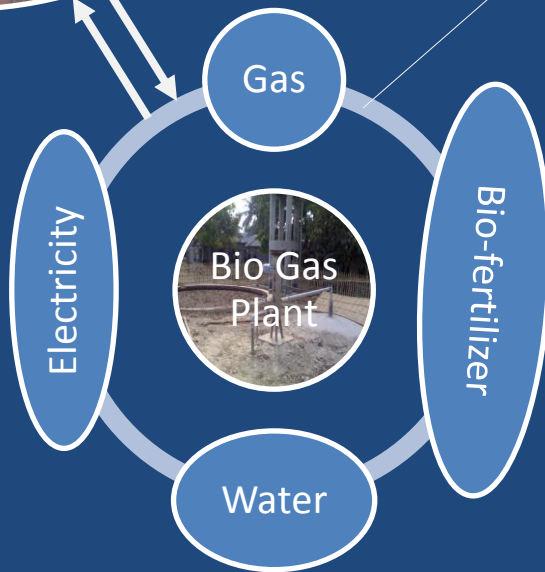
Items	Feed base			Genetics			Seasons		
	Good	Poor	Sig.	Local	Crosses	Sig.	Dry	Wet	Sig.
Feeding and Nutrition									
Live weight, Kg	351	215	p<0.00	248	319	p<0.00	284	282	NS
Daily DMI, Kg/head	8.53	5.4	p<0.00	5.75	8.17	p<0.00	6.99	6.93	NS
Milk Yield, Kg	6.76	3.67	p<0.00	3.26	7.18	p<0.00	5.27	5.17	NS
Milk Fat%	3.96	3.73	NS	3.96	3.73	NS	3.96	3.73	NS
Enteric CH₄ production									
Kg CH ₄ /Kg Milk	0.035	0.07	p<0.00	0.069	0.036	p<0.00	0.055	0.050	NS
Emission Factor, Kg CH ₄ /head/year	66.4	61.5	p<0.05	57.8	76.1	p<0.00	63.9	63.9	NS

- Better feeding reduced KgCH₄/Kg milk
- Better genotypes reduced KgCH₄/Kg milk
- No seasonal impacts on enteric CH₄ production
- Dairy development may support safe environment

Relation between enteric CH₄ production and daily milk yield of cows of Bangladesh



Dairying-a one step service for food, bio-energy & water

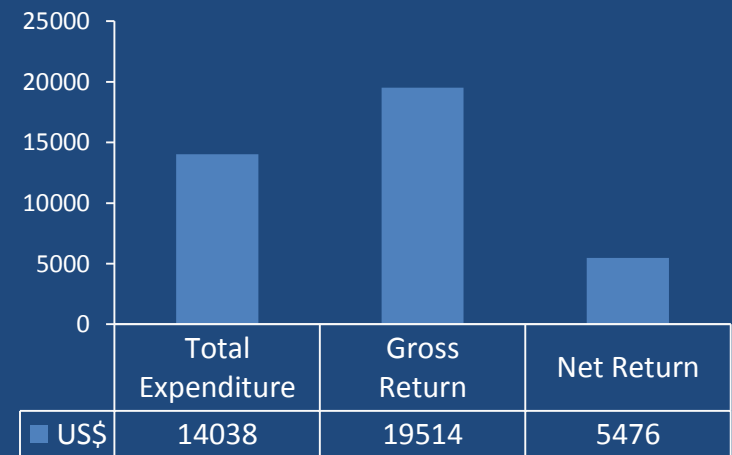


Tearband Community Bio Gas Plant (On-Farm)

Performance of 2012 (Sarker & Uddin, 2013)

- Feeding 2000 Kg waste/day
- Produce gas- 72 to 108 m³
- Bio gas to 42 families & 2 dairy farms
- Electricity to 28 Families
- Bio-fertilizer: Daily 500 to 600 Kg
- Water supply to 37 Families

Balance Sheet of 2012 of Tearband



School Milk feeding program of FAO



FAO has been implementing a tri-country SDD programme financed by the CFC & the APHCA in BANGLADESH

As one of the SDDP activities, Milk Vita is donating daily @200.0ml/head milk to 2039 school children including 1037 girls

Average response in six (6) months	Schools Cont rol	Milk Fed	Sig.
Height increase, cm	1.77	2.96	p<0.000
Weight gain , Kg	1.44	2.65	p<0.001
Attend. increase, %	-	9.33	-
Passing, % increase	-	16.3	-

- Increased height & weight
- A longer demo period required
- An in-built system in the local govt. or the support of govt. safety net program could be options for its sustainability

Way forwards

Domestic production growth	Domestic growth, %	2.68	<ul style="list-style-type: none"> ➤ Buffalo share of 2.29% in milk production may be increased ➤ Deficit of >45% energy & >75% DCP supply warrants year round quality fodder supply & adoption of feed value addition technology to minimize supply & demand mismatch round a year
	Import growth, %	18.8	
	Annual per capita availability, Kg	24.8	
	Annual per capita target, kg	91.3	
Widening of dairy marketing	Structured market Middlemen share Local market share MV covers of total cows Private Entreps.	7.64% 34%-39% 52%-54% 1.21% >9	Enacting an apex body for coordinating public & private initiatives
Regional cooperation	Bangladesh dairy is economically potential, socially important, ecologically sensible and regionally receptive to collaboration and coordination		A Regional Dairy Platform for <ul style="list-style-type: none"> a) sharing success in and policy of the regional dairies b) helping mobilization of public and private investment c) initiating regional collaborative programmes

Thanks
to
Smallholder dairy farmers