



Handwritten signature



Government of India

Ministry of Agriculture

(Department of Agriculture and Co-operation)

NATIONAL COMMISSION ON FARMERS

AND

DEPT. OF CO-OPERATION, GOVT. OF KARNATAKA

REGIONAL CONSULTATIONS ON AGRICULTURAL

MARKETING

10-11th MAY 2005

**Venue : Conference Hall of Karnataka State Co-op. Apex Bank
Chamarajpet, Bangalore**

Agricultural Marketing

Gamble in Market - Medicinal Pearl

① Marketing - end of the chain

Production Planning

Efficient marketing starts with production

land use: Proactive advice - Planning

based on meteorological

and marketing factors

Restrictive & Retool Land Use

Boards to achieve

a match between supply

and demand.

② Quality & Trade Literacy

Codes Alimentarius standards

New Food Act.

③ Every Village a Knowledge
centre

WTO Fair but not free

- (3) Contracting trends in
Marketing at the global level
Large multinationals, eg. Carrefour
Cost, quality, reliability of
supply

India: 115 million farming families

70% of members are
producers

- (4) Power of scale
eg. Dairy industry

Cooperatives

SHCCL - Federation of SHCs

- (5) Contract Farming

Wide range of crops

for CIOI & State Govts at
baseline to local farmers

New Generation Cooperatives

Fair Trade Commission

(Sustainable Trade Commission)

(b) Mind set change

Rafi Ahmed Kidwai

Draft Model Act

Chapter VIII

Regulation of Trading

Promotion of Sustainable Trade
Fair

Shri Y. C. Nanda,
Dr. Alkhaya Prakash,
Dr. A. Banaswary,
Dr. P. K. Agarwal.

Dr. Shantanu Gansul.

Dr. Syed Zameer Parake

May 11, 2005

Indian Institute of Chemical

Technology, Hyderabad

1944 to 2004

(1944 - 2004)

Waste water treated, pheromones

Rice Bran oil for

Rice Bio-Parf.

Science for Agriculture

Nutraceuticals

Dr Lakshmi - IPR Deregulation

Dr Ajit Kumar - NMR.

Dr Yadav, organic chemist.

IICT

60 years (1944 - 2004)

Established by Muzan
in 1944

Shifted to F-birds Compounds

Biofuels.

1998 - 2001 (approx) - 1000
T 0 1 1

1998 - 2001 (approx) - 1000

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Erwde . 15 May, 2005

Sesame (Til) Village

Project

Idhayam Sesame oil.

V.R. Muthu, Chief Executive

VVV + Sons, Virudhunagar

Nearly 14,000 tonnes of oil

Nearly 100 crore - India,
Sri Lanka, Malaysia, the Gulf

Countries, & US

Product should be available
and visible

V.V. V. Rajendran founded

The Idhaya group in

1986. Another Brand

"Deht" has also been
introduced

Sourcing of Sesame

Tamil Nadu, Andhra
Pradesh, Gujarat, Maharashtra
& Rajasthan

The oil is manufactured
at Winturaga. The

group has diversified into
textile industry

Rasathi Hosiery was

set up in 1996

Sesame oil Antibacterial.

Potent antioxidant.

In the pores beneath
the skin, the oil will
neutralize oxygen radicals.
It penetrates into the
skin quickly.

Sesame

is an ancient spice

Roman & Egyptian used
it over 5000 years ago.

One of the oldest seeds
known to mankind.

Edkagan Cup

1986.

Shri V. R. Muthu

Father

VVV Rajender

W K. Rajeswaran

Dr N. Shankha Shella, Erude

Sesame Village.

Farm School.

Village Knowledge Centre

Tamil Nadu

Area — 64680 ha

Production

Yield 591 Kg/ha

Coimbatore

Erude

Thiruvannamalai

3 top

districts

Edhayan

Rajasthan (2)

Orissa (1), M. dhyā
Produkt

30 000 t of Sesame

16 000 t of oil

Seeds.

Agronomy

Plant Production

West Bengal : 109 000 ha

Yield 789 / ha.

Tamil Nadu 138 000 ha.

Yield 543 kg / ha

India : 25.7% of the world's area

Production : 2nd in the world

next to China

Average productivity (396 kg / a)

is less

High protein & high calcium of
the oil seed

Organic Farming

Seeds, water, credit,
Technology & market.

Sesame Village Project

Quality - quantity

1 t./ha

NCF

National Policy for Farmers

Farm Schools

50,000 schools

Dr V. Muralidharan

Season : 6 lakh ha

Tamil Nadu : 536 kg/ha.

Andhra Pradesh : over 700 kg/ha.

Potential = 25 quintals/ha

5 to 25 quintals.

Scope 5 fold increase.

Seed Colour : Black, Brown
& White

Dr V. Murgappan

Closing Remarks

I Dr. Muradkhani + Dr. Ramadethan

Average yield 5 q/ha

Scope for increase up to 10 q/ha

Target for 2007

Income + Value
addn

Sesame Villages

II Quality Improvement + Value addition

Black, Brown + White ^{oil yield}
seeds - oil content

Dr. Murugesan + Dr. Marimuthu

III Sustainable agriculture

Knowledge
Revolution

Ever-green Revolution

Soil health care

Organic Farming

Winnona
G 21/10/07
00:10

Oilseed Technologies

Desem

Sub-Desem m

Sesame

V Dr Mungappa

Community health care

— Sesame Villages

VI Dr T.S. R. Rana Krishna

Farm Schools Lab to Land &
Farmer's clubs Land to Lab.

Farmers, Scientists,
Agri clinics + Bunking
Agri centres — Traders + Banks

Sesame: Crop of choice in
dry farming areas

More income

Good feed : Sesame Seed
Villages

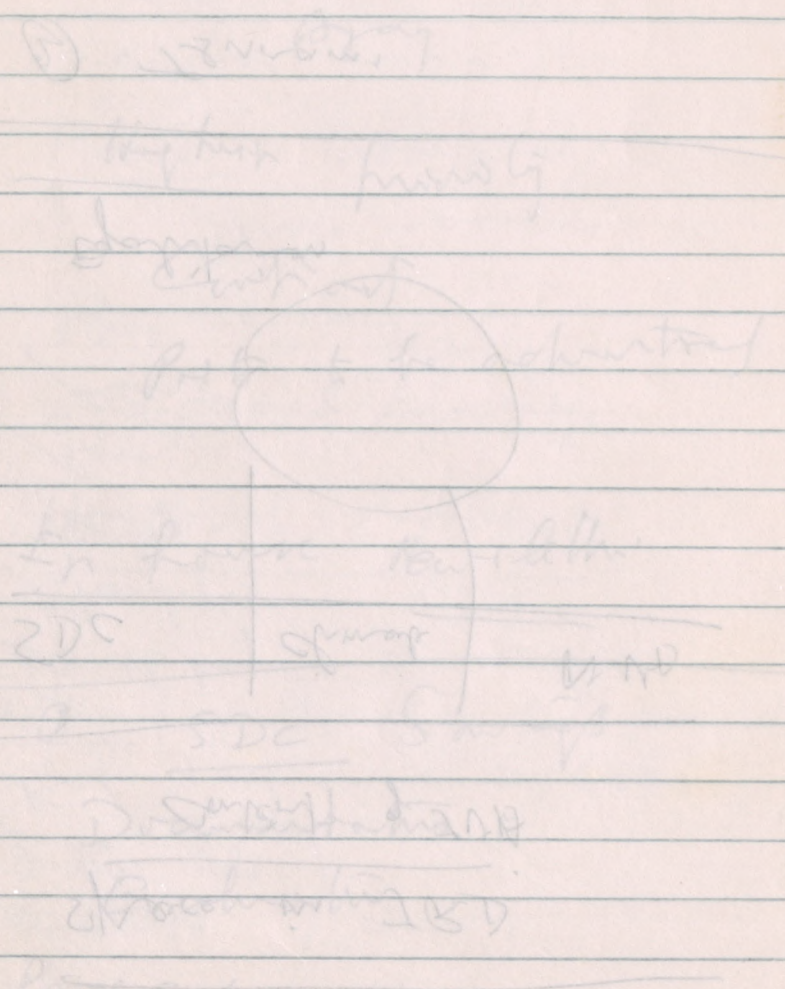
Shri V.R. Mulkhikar

Sarvian of Sesame

Kurien - Milk

BV Rao - Poultry

V.R. Mulkhikar - Sesame



more details...

Marketing Szeintsh Room

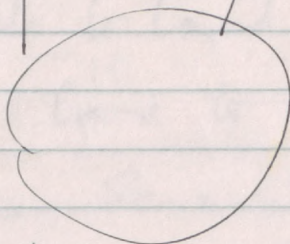
Space in TRD

Content of TVA

SDC

Climate

NVA



Egalitarian

② Tsunamis

Express

Staff positions to be filled

Shaping the Future

17/5
COU
Operational Group

Thangazhi, Chennai

Senith

Selvam

Ajay

High level priority

Contract

PIB to be advertised

In house New-clerk

① SDC Savings

Documentation

Evaluation

Proposed

16/5

~~A. Nankh~~

~~Sudha~~

~~Ajay~~

~~Gita~~

~~Kanthe Keyer~~

~~Thandighi~~

~~Sankhi~~

~~Ram~~

~~Kesavani~~

17/5

Gene Campaign, New Delhi

Dr Purnan Sahas

Food + livelihood

security of farm +
adivasi communities

Focus : Biological +

genetic resources.

Policy advocacy.

+ indigenous knowledge

Def. of Govt. Regulation +

Policy

Tata Trusts: Education + Information
program on Def. Govt.

Kumraon Hills

Tharbhari

Bitan

Areas of

operation

Roghu : Indigenous Knowledge

Santosh

Kaman Hills Project

customary laws,
organic / green agriculture

Rangank blood &
natural diet

Legal Whirly

Shankar & Bhar

Herbal Garden

Shakheel

IK in Patents Act

Act

① Draft sui generis act
for Indigenous
knowledge

• Empowerment of farmers
with knowledge

• Food security +
Agro-biodiversity

• Validation of IK

② Bio diversity Policy
Choices. — how to
Choose.

③ Implementation of Pl. Variety Protection
& Farmers' Rights
Notification yet to be done

19/5

Ajay Mehta

Roll no

Power

IT infrastructure

Connectivity

Literacy in 40 days

in any of the Indian

languages - TCS -

Kreppan

PC book

PC - TV - Telephone

PSU website

4 - in - 1 PC

PC kiosks - Pondicherry

Kiosk - lab - Chennai

Bicycle - Pedal generator

Use labour for C&S
for peddling to bicycle

W/Os: Emerging technology

Can cover 40 Km riding

Sultanya

Saganika

Senithul

ASS.

① President Clinton's

Vest

② IJRC Project

Tamil Nadu

Orissa

Andhra Pradesh

Rema Namawally

① NABARD Guidelines ✓

② updating policy paper. ✓

③ Next meety of the Alliance.

④ Academy Fellowship

Geeta Sharma

web site

Data base on Alliance Partners

Mr Narain to nominate
a representative on
the Alliance

DIR can support the

Securhorial for 1 year.

① Copyright notice

① Dr Chidambaram - to too

cross to NABARD
Mr Maran - Representative of Ministry

Ministry of Rural

Development - Rs 500 crore.

Capacity Building Data
base

NABARD Guidelines

ISTS HQ's

—> Sukhanya Ratha

II Update the Policy Paper

BRAC.

C Sh Chakrabarti

10

Natural Akhara

12-13 July, 2008

Coordination

Ashok

Connectivity

Jungunder

Applicable
Actional
Diplomatic

Ajay

~~Akha~~
Choudhury

Content

Dr. N. Balaji

Aruna Roy

~~Anita Gupta~~

~~Dr. Shu Kumar~~

~~Naraina~~

Capacity

Buddy

~~Bah~~

Ankhi Das

Care +

Dr. Palanidurai

Navigator

Naraina

Bah

Coordination

Shashi

urgance

Subhany

Keynote Addresses

Mr Narain

DC, WSIS,

Mr Sam Pitroda

Davarkwa, President, CII

~~Kiran Karik~~

Rama Dorai, Chairman,
NASPCO II

Azim Premji

Narain Patnaik

Valunder Rays

Rajalokharan Reddy

Mr. Madhavan Nair

Fellow of the Janselzi

National Academy

Main Shankar Jais

Panchayat - Raj & Rural
Knowledge Bank

Fellow of NVD

George Nathan

Sy Suryakant Ardiva

Kerala.

Funday

Ratan Tata

Letter

National PRA

with women

Fellow of

Feedback ^{NVD} for the Grassroot

NVA

12 - 13 July, 2005

~~① De PM -~~

② ~~Nahat~~ M Dayanidhi
Naran

Every Village a Knowledge
Centre

~~③~~ Ratan Tala

~~④~~ Soanya

⑤ 94440 57478

Lahore

① Avani Lahore Hotel

92-42-636 6366

637 5805

23 May

Dinner - discuss - 8.30 pm

Avani Hotel

24 May

8.00 am. H.E. Lt. Gen Khalid

Magbool

Governor of Punjab

25 May . Release of Anwar Dil's

book. - Dr Sartaj Aziz

Rector Beacon House National

University

26 May

Dr Khalid Tariq

Choudhry

President, Pakistan chapter FABF

① Prof. S. Riazuddin
National Professor & Director
National Centre for Excellence
in Molecular Biology -
Lahore

② Dr Anwar Nasim
Advisor, Science
COMS TECH Secretariat
Islamabad; chairman,
National Commission on Biotechnology

③ Dr Karwal Malik, Coordinator
National Commission on Biotechnology

④ Dr Kamran A. Malik
Secretary
National Commission on
Biotechnology

⑤ Prof. Dr Khaliq Mehmood Khan
Secretary General, Pakistan
Academy of Sciences

(6) Dr Ahmed M. Khalid
Director,
National Institute for
Biotechnology & Genetic Engineering

(7) Dr Khalid Aftab
Vice Chancellor, Government
College University

(8) Mr Khalid Ahmed, Consulting
Editor, The Friday Times

(9) Syed Babar Ali

USA

Dr Roger Beachy
Patricia Wrightson
Harry Barnes

24 May, 2005, Lahore

Pakistan - US - India

discussion on Agricultural

Biotechnology

Sustainable
Biotechnology of Food Security

Availability of Food

Access - livelihoods -

Bio village

Absorption - Bio remediation

Hunger : Endemic

Hidden

Transient

Tripartite Cooperative Programme

I USA — Danforth center for
Plant Sciences
(Dr Roger Beachy)

II Pakistan

- ① National Center of Excellence
in Molecular Biology,
University of Punjab,
(Dr S. Riazuddin) Lahore
- ② National Institute for
Biotechnology + Genetic Engineering
Fundamental
(Dr Ahmed M. Khalid)

May 26, 2005

Faisalabad

Dr. Ahmad M. Khalid

Director

National Institute for Biotechnology
and Genetic Engineering

Faisalabad Agricultural University

Lyallpur Agri College

Established in 1906

6 Faculties .

— Dr. Iftikhar Ahmad
Khan, Director CABB

— DR. BASHIR AHMAD, vice chancellor
Univ. of Agri., Faisalabad (Pakistan).

Pakistan Punjab

& Cakes tube wells

More than 50's of water
from tube wells

Salinity is a problem

Profitability & risk are
important

Dr Iftikhar Ahmad Khan
Chairman

Dept of Plant Breeding & Genetics

Rejuvenation of technology
Centre for Biotechnology

Creases - wheel, rice
Rice cups - as for
outsider, Punjab -

Vegetable breeding

Marker assisted selection.

Geneplex is characterised
on a multi-location trials.

Marker assisted selection in
Cotton + wheat (for salinity-tolerance)

Centre for Agriculture
Biochemistry + Biotechnology

(CABB) -

Brassica yield is
stagnant + input of
oil is increasing.

27 May, 2005

Shahid Mahmood Khan

Wheat, Rice

Organic Farming

Soil health improvement

- Organic Manure & Compost

- Green Manure crops

- Vermiculture &

Plant-health management ¹ Crop rotation (barber)

Certification

Soil Health

Plant Health

Consumer Education

Marketing - Certification

National Academy of
Agricultural Sciences

4 June, 2001 Congratulations to
Dr Pangal Suresh

54 Meeting of the Executive
Council

① President : M. S. Swaminathan

② Vice Presidents : Dr Pangal Suresh
Dr C. R. Bhatia

③ Secretaries : Dr S. Ayyappa
Dr R. K. Swigth

④ Treasurer : Dr M. L. Lodha

⑤ Foreign Secretary

~~Dr A. L. Lodha~~

S. M. Viswanath

⑥ Editor : Dr Y. P. Bhatia
Dr B. V. John

Members

Dr Anwar Khan.

Dr S. S. Acharya.

Dr S. K. Adhya

Dr B. V. Dand

Dr B. S. Dhillon

Dr S. P. Ghosh

Dr S. L. Inthoka

Dr I. C. Mahapatra

Dr S. S. Kalam

Dr M. V. Daya Kumar

Dr B. V. Mathur

Dr S. Nagarajan

Others

Prof V. C. Chopra

Dr Rangabai Rao

Congratulate . Dr Rangabai Singh

Dr S. S. Acharya.

Dr. Panjab Singh
Dr. Kannaiyan, Biodiversity
Dr. S. Nagarajan, Botany
Award

PG

CTI (1 Yr Deverthran,
NASSCOM (Mr Ramadran)

Dr. Rupa Sharma, FA

Policy Papers - PM

September - EC

Chief Minister

Shriharaj
Pawar

Centenary of Agricultural
Research + Education

S V Subba Rao NAOI to sponsor

Pakistan Visit - Send to

Dr. Nagale Rao

Dr. Bahr

Seneby, MCA

Technology Review

Shreed
Kechu

Dr
San Petrusden

June 5, 2005

World Environment Day

The Herald (Delhi), Water Libracy
Report

Waterless Delhiites Take

to the Streets

Kerala becoming warmer

Warmer by 0.5°C

per capita fresh water

availability in Kerala is one

of the lowest in the country.

While 17.2% of the villages do not have access to safe drinking water, 90% of the open wells have been affected

by faecal contamination. Industrial effluents have contaminated the ground water

Import of 2 1000 metric tons
Edible oilseeds: 12 000 tons

oilseed processing is also in
dishes

Cost of processing 40%.

more to process a
ton of soybeans.

90% more than in USA

Causes for Technical
inefficiencies

Raw crops (80% of area)

Groundnut

Rape Seed Mustard

Soybean

Sunflower.

Measurement of alternative
inefficiency

Maximum Return per Water

Range 1.45 to 3.5

$\frac{1}{3}$ to $\frac{1}{4}$ technical
inefficiencies in oil seed
production

The combined technical
inefficiencies come to
over 50%

Marginal return to
water is high.

Dr. Muthyungaraja → Production
Process, inefficiencies

Lessons for the Technology

Attention on oil seeds -
Small Farmers oil seed Production

Dr. Chitrakanta Chatterjee
(unknown)

Micronutrients Research.

Gap in oilseed production.

between potential & actual

— 30 to 80 %

knowledge input & the
financial capability to
apply the knowledge

Profit maximising &
risk minimising techniques

Soybean - biofertiliser is
essential.

Dr. M. V. Rao

Technology Thesis on
oilseeds.

Growth
potential

Sunflower : 0.5 t/ha
Soybean :

Rice bran oil: potential 2 richest.

Import policy favours imports.

D. K. V. Prabhu, IARI

Marker assisted selection for
leaf rust resistance in wheat

Pyramiding of Lr genes

Gene Deployment &

control 5 to 70% yield
loss in wheat world over

A slow rusting type

One Lr32 from Triticum tauschii

5.6.2008

Sunita Narain . Water Security

Increase supply

Use prudently

Quality

Even with 11000 - 14000 mm

of rain, cheapening

experiences through 9 months

of the year

119 million ha is raised

of which 70 mha under

food grain - More than 60%

over 80% of agricultural

output today is from ground

water

Ground water use has

doubled in recent years

Groundwater → 90% of drinking water
→ 80% of agricultural productivity

22 Billion livelihood users

Lakes - sponges of water
Conjunctive irrigation

Build the sponges for
groundwater

Recharge individual cells

Ecological Poverty

Photosynthesis pathway
of ~~food~~ poverty alleviation

Local (Community) Food
Security System

5/8/2023
Environmental management is
about deepening democracy

Kerala: Highest well density
in the world - 3 wells / ha
over 2000 ha, - average
rainfall

Panikula: the great challenge

Hydrocide: Pollutives

Saving grace of India - the
press

NMDC - ACM

Reformulary Annual Report

Academy - Policy Lobby
Media Advisory Committee

5/6/2007.

Dr M. K. Bhan

Bio-technology Policy of India

Feed back : Rightly

Technology forage -

BT, ICT

Environmental Bio-technology

Bio-remediation

EM.

Policy: Take the right
choices.

Bio-remediation & bio-technology.

7 June, 2005

I President (2.45 pm)

(a) National Alliance & Convoal -

July 12 Nov ~ July 11-13, 2005

|| Employment generation

30%

(b) Science Congress

5 January, 2006.

Connectivity

- Wallampath, Veeraman.

Knowledge centres

Jatropha

Dinday

July 11, 12 Nov

Prime Minister (No. 45 au S. Bhak)

- (1) Farm Situation —
Private Advice } Delivery
 } Parcel

Soil test kit

Horticulture & other Missions

Professionalism

- (2) Andamans

Suggest names for
Mission Director,
Horticulture

Fiskerier

Boat

Boat Repair

Net repair

Weaving the net

Fruits & vegetables process

How to create

live hood

Natural Horticulture Nurseries

Natural Technical Advisory
or Nourishing committee

Chair - Dr. V. L. Chauda

Dr. V. Prakash, CFTS

Dr. Narasimhan Bhavani

Dr. Mehtab Baniya

Murari Sir H. P. Singh

Dr. -

D. H. P. Singh
Dean of Horticulture
Agriculture
C B Pant University

Director Horticulture
C B Pant University

Director Horticulture
C B Pant University

Director Horticulture
C B Pant University

Director Horticulture
C B Pant University

Director

Director Horticulture
C B Pant University

Director Horticulture
C B Pant University

29 June, 2005

① Meeting taken by Shri Sharad Pawan.

2nd report of NCF

Monday or Tuesday 2nd August
August 1.

Massachusetts Committee Report

Technology Review

2nd August

Serving Farmers & Saving Farming

① Current Agricultural Scenario

- NDC ← PM
← Mr Sharad Pawar.

- Planning Commission - Mid-term appraisal.

• Agrarian crisis

Multiple factors -

Credit, delivery of services

(inputs, extension, etc)

Technology fatigue

(Consult Srinath & Daniander Sharma)

- Water - first report

- Credit - ,

- Technology ← DSS
← R D Madhok

- Market

Madhwa (033) 23347654

P C Kelawan

23595516

044 55299023

Rajy Pande

044) 55161514 R,

55299022, 0)

Senthil

044 2254279)

Adhara

044 22542790

Raghuvar Reddy Leche

Wednesday - June 29

Tuesday, August - 30

Salih / Fa. Jayanthi

(0422)

2551 536

2855 295

2557 612

ISC.

3096 6796

Jet: 1.30 ju.

Malavika

24 35 74 00

New Andamans

- I
- ① Letter to Deputy Chairman,
Planning Commission
 - ② Resavan to write an
article for the Herald
 - ③ Kuridin Media Resource
Centre - briefing

II Power Points for Papietan

Arlyar (0) 94 25 00 66 91

Sudhr (0) 93 00 80 17 37

Time 4 - Shah dunn

Radhna

(033) 2334 7654

Anand

English - 97

Lit - 92

History - 94

Eco - 92

Maths - 96

$$\begin{array}{r} 5 \overline{) 471} \quad (94 \div 1 \\ \underline{45} \\ 21 \end{array}$$

oichi - dedication

"

Dedicated to the children,

women and men who lost

their ~~by~~ lives in the

nuclear holocaust in

Hiroshima + Nagasaki in ¹⁹⁴⁵~~1940~~

and who remind us for
ever. of our responsibility

to work for a nuclear
~~peril free~~ peril free
world,

Aparsh Ducha

2625 8125

2625 1056

Reema Malkhan Nuke

2555 7589 0/

2812 1953

2559 999 1/2/3

NCF

Nutrition Security

(I) Paradigm shift from food security at the macro level to nutrition security (i.e., balanced diet and clean drinking water) at the level of every child, woman & man

(II) Components

1. Restructuring delivery of nutrition support programmes on a life cycle basis
2. Identification of the

hungry by the Green Satta

3. Special nutrition support programmes for pregnant women, 0 to 2 age group children and individuals affected by HIV/AIDS, TB & leprosy

4. Eliminating hidden hunger through an integrated food cum nutr. fortified salt programme

5. Involving Green Satta and Panchayat in clean drinking water & environmental hygiene

6. Enhancing opportunities
for skilled employment
in the farm and off-farm
sectors

IIC Room No. 3096 6796

Dr. Nalini. 2271 3961

Ankur 98 99 0001 35

Jayamma 2686 5137

Gopulakrishnan (P110)

2301 5944 (0)

2338 9628 By

Shakti - 2627 2989

Pallavi Bagla - 2271 2896

98 103 01400

Sudhan

093 0080 1737

KRISHNA SAHAJ
1978 Batch IRS
ICT- Mumbai

Posting to Delhi
Brigade for Delhi

Mr. Palani Manickam

23092377

23094108

Posted to Patne
personal safety concern
a single woman

Pune

Date _____

17 Feb, 2005

Vasantdada Sugar Institute

- ① Pt. V. P. Rane, IAS, Director General
- ② Dr Y S. Menkar, Director,
Agriculture, VSI
- ③ Phiroji Rao Deshmukh,
Secretary (Agriculture)
- ④ Dr ^{S.K}_h Coel, Commissioner,
(Agriculture)

Area: 4.36 Million ha

Annual production (2002-03)

281.6 Million tonnes

Sugarcane: 3% of the total
cultivated area.

7.5% of gross value to the
agricultural products

Com, Khandeain nichushis
Bafano Press and.

553 Sugar mills in 2002-03

20.14 Million t of Sugar in 2002

Production may go down
to 12 to 12.5 million t.

Average yield: 64.6 t/ha.

Sugar Recovery: 10.36%.

Maharashtra

Area 5.99 lakh ha

Cane yield: 78.1 t / ha

Sugar recovery: 11.6 % of cane

Sugarcane yield

2002-03 - 64.6 t / ha

Sugarcane recovery - 10.36 %

Balwin crop

50 Million Farmers grow
& depend on Sugarcane

50 million - Agricultural
labourers

Sugarcane : Second largest
 agro-based industry,
 next to textiles

4.36 Million ha)
 281.6 million t) 2002-03

50 Million farmers
 50 million tonnes

Average per capita consumption
 — 18.3 kg / Ann.

Need for Sugar:

2.7 million t by 2010

Productivity should go up

to 95 to 100 mt / ha

Sugar recovery, 11%

The Committee for Revitalization
of Sugar Industry headed by Tulağa

need: Rs 33220 crore over a
 period of 5 years

Cane
Producers

(farmers)

Sugar Processors

Prices affect adversely

Sugarcane - Sugarbeet

Continuation.

Bottom line: Production by
 Quality

Value-addedness

Dr. Nanda

Sugar industry is the largest rural-based industry

Sugarcane is the most profitable ~~crop~~ crop

Productivity & Quality improvement

UP has 45% of sugarcane

3 Points

(1) Rainfall - water

(2) Health of sugar industry

(3) Electives - policies.

Sugar Cooperatives

Sugar industry is poorly capitalised

Enhancing Profitability

Sugarcane - Sugarbeet - Sweet Sorghum

Ethanol production - part of
diversification

Dr R. B. Singh

UP: In spite of soil
& water resource, the
yields per hectare & recovery
are low.

Cooperative Payment to farmers

Small holdings - Cooperatives
have failed in UP

Corporate ~~let~~ sugarcane growers
Biofertilizers & biopesticides

Date _____

Enhancing Profitability

Sugarcane - Sugar beet - sweet sorghum

Ethanol production - part of
diversification

Dr R. B. Singh

UP: Degrade of soil
& water resource, the
yields per hectare & recovery
are low.

Crucial Payment to farmers

Small holdings - Cooperatives
have failed in UP

Corporate led sugarcane progress
Biofertilizers & biopesticides

Role of Farmers

- ① Farm Schools : in the fields of sugarcane farmers productivity have risen 100% per hectare and a sugar recovery of over 10%.

SHAs

- ② Quality Seeds: Trine
10) cultivars SHAs
by Biopesticides & biofertilizers

- ③ Sugarcane Cooperatives
Sugarcane Sugarcane
| |
Factories → Factories

- ④ Small Farmers' Sugarcane Estates

- ⑤ Minimum Mode - Sugarcane Based