

# Strategies for Full Employment

***Uncommon Opportunities:  
Roadmap for Employment, Food & Global Security***

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The Mother's Service Society, Pondicherry

# Unemployment

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- 1993-94 20M
- 1999-00 27M
- Twice as high for lower consumption classes
- On daily basis 35M
- Youth Unemployment 13%
  - Kerala 35%

# Natural Employment Generation

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- New entrants to labour force 7-8M/yr
  - Urban migration 1M/yr
  - Agriculture employment is flat
  - Less growth in unemployment -1M/yr
  - **Natural job generation 7-8M/yr**
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- The absence of social unrest and the fact that urban migration continues and urban unemployment does not rise enormously indicate the surpluses are being absorbed.
  - This is unorganized, unconscious process akin to education without schools

**Make the unconscious process CONSCIOUS**

# *How society stimulates employment*

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- *New products*
- *New services*
- *Growth in demand*
- *Technological innovation*
- *Higher quality &/or productivity*
- *Organizational innovation*
- *Higher skills*
- *Better access to information*
- *Increased speed*
- *Legislation & law enforcement*
- *Administrative responsiveness*
- *Environment/health consciousness*
- *Change of attitudes*

# Three Approaches to Employment Generation

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- Expand existing activities
- Borrow from other countries
- Promote culturally compatible activities

# Where are the untapped potentials

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- Raise farm productivity
- Renewable energy
- Agro-industrial linkages
- Service sector
- Employable skills
- Application of IT

# Prosperity 2000 Strategy

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- Agriculture as engine for industrialization & employment growth
- Shift focus from meeting minimum production needs to maximumizing profit per unit land & water
- Projecting market growth based on nutritional requirements
- Raise productivity of soil & water
- Shift to commercial crops which absorb more labour
- Develop industry linkages with industries
- Create 4.5 M direct & 5.5 M indirect employment opportunities per year

# Horticulture

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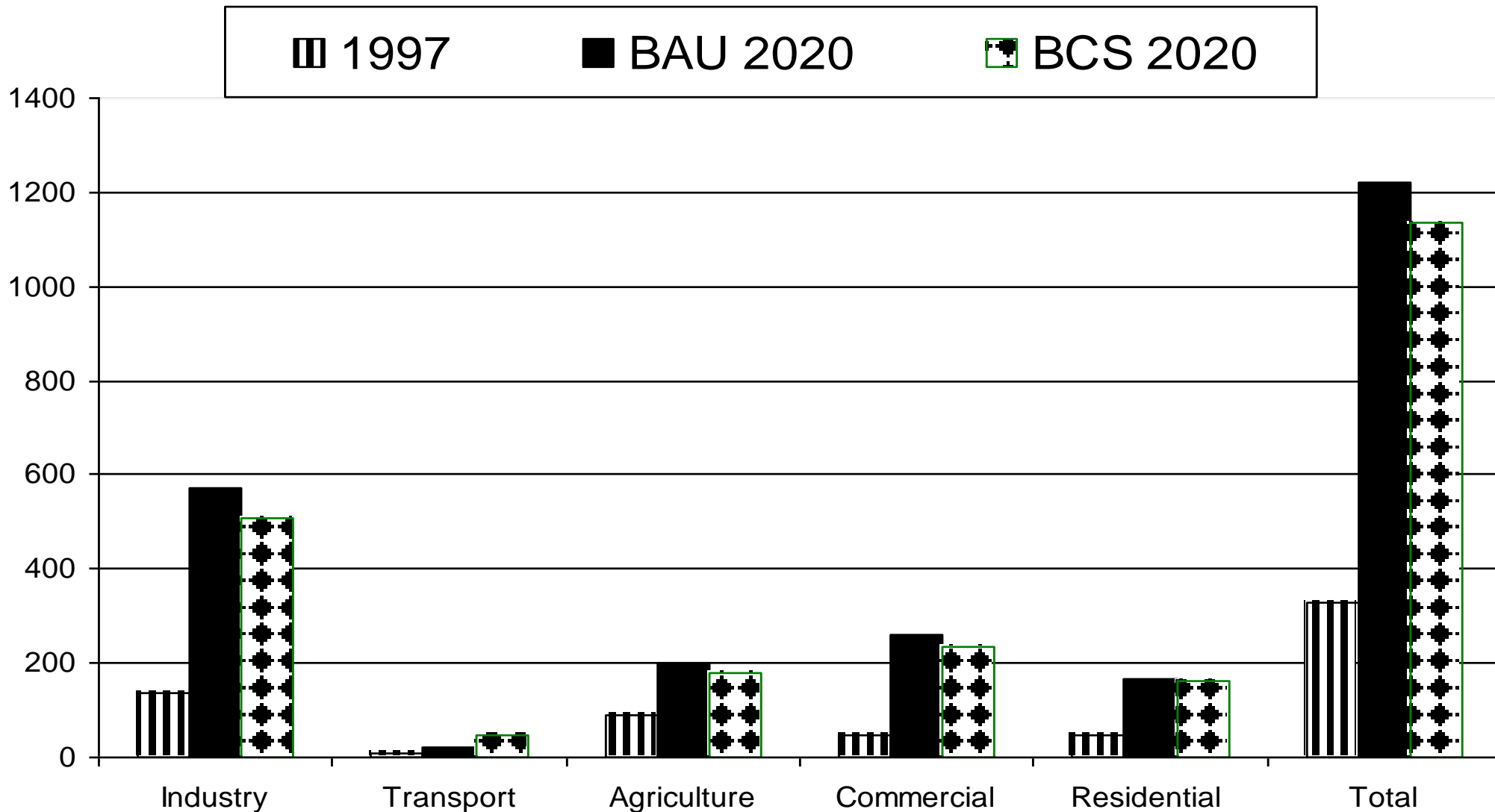
- Labour content 6 times cereals
- Generates 10-30 times earning / unit area
- Filling India's nutritional gap requires 40% growth
- Add 4M ha horticulture to raise production 40%
- **Generate 8 million jobs**

# Food Processing

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- Improve storage & processing to reduce Rs 70,000 crores in crop losses
- Global share of processed food exports is rising
- India processes only 2% fruits & vegetables vs. Thailand 30%, Brazil 70%, Philippines & Malaysia 78-80%)
- India projected to process 10% fruit & veg by 2010
- Industry directly employs 1.6M

# Power Demand to Triple by 2020

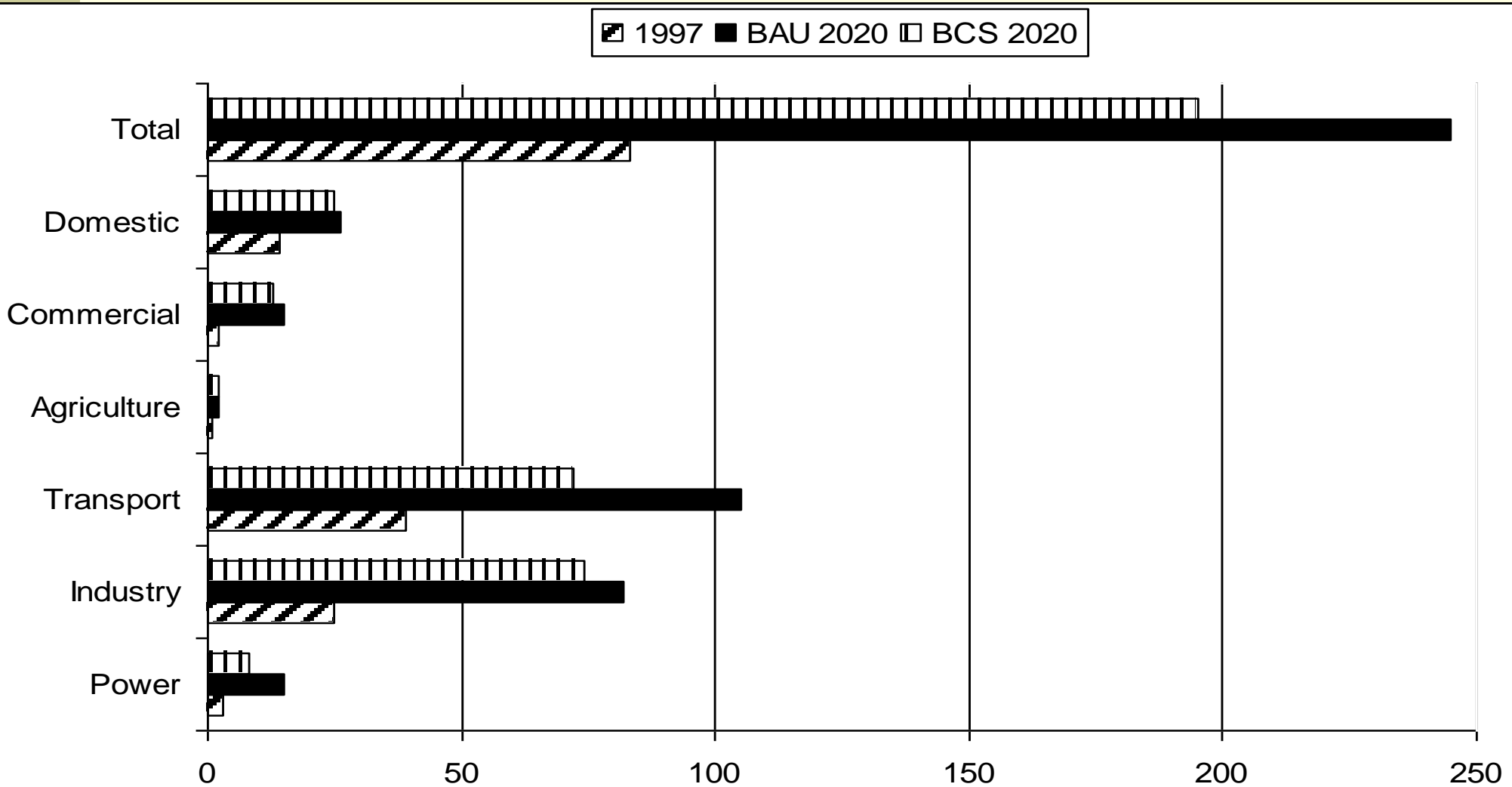


# Biomass Power Generation

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- Cultivate energy plantations -- casuarina, bamboo, prosopis on rain-fed & irrigated lands
- Power plants 6-25 MW cost Rs 3 cr per MW
- Cost/unit Rs 2.50 on biomass at Rs 800 per ton
- Develop 10 million ha of energy plantation
- Establish 4000 units, 40,000 MW
- Reduce transmission losses
- **Create 5 million jobs**

# Oil Demand to Triple by 2020



# Bio-diesel from Jatropha

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- Develop 5 million ha
- Earn Rs 20,000 per acre (irrigated) from 3<sup>rd</sup> yr
- Establish 2500 oil expeller units
- Produce 10 MT biodiesel valued at Rs 20,000 cr
- **Create 5 million jobs**

# Ethanol from Sugarbeet & Sweet Sorghum

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- Sugarbeet produces twice the sugar in 5½ mon
- Only 40% water consumption
- Add or shift 3 M ha for sugarbeet
- Additional 15 MT sugar for export or ethanol
- Raise sweet sorghum for ethanol rest of year
- Produce 10 MT tons ethanol for domestic & export
- **Generate 8 million jobs**

# Edible Oil from Paradise Tree

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- India imports Rs 6,000 cr of edible oil / year
- Paradise tree is rainfed, oil-seed crop from Brazil containing 50% edible oil
- Cultivate 5 M ha Paradise Tree on degraded forest lands
- Establish 2500 oil expeller units
- Produce 7.5 MT of edible oil worth Rs 22,000 crores
- **Create 2.5 million year-round jobs**

# Cotton & Textile Industry

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- India is 3<sup>rd</sup> largest producer of cotton
- Domestic demand projected to grow 70% by 2010
- Export demand projected to triple by 2010
- Double productivity of cotton
- Double area under irrigated cotton
- **12 million additional jobs in textile industry**

# Forestry, Herbs, Medicinal Plants

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- 100 M rely on forests for main source of livelihood, including half of India's 70M tribals
- Objective to raise forest cover 50% in 10 ys
- Introduce corporate contract farming with bonded performance guarantees & assured employment for local population

# Fisheries

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- World seafood market doubled in the 1990s
- India's marine & inland fisheries employ 6M
- 1/3rd of India's marine fishery potential untapped
- China full-time employment in rural aquaculture
  - 1989 – 1.5M
  - 1997 – 3.3M
- Shrimp farming -- 4 direct & 4 indirect jobs per ha
  - 1999 – 161,000 ha generates employment for 1.3M
  - Additional 120,000 ha would create 1M jobs

# Dairy

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- Rs 100,000 crores by 2005
- India is largest and lowest cost producer
- 70M dairy farmers
- Cooperatives provide employment for 11M families
- Potential for 42M jobs

# Employment Potential -- details

Crop productivity growth	5,000,000
Horticulture – 4 M hectares	8,000,000
Biomass power – 10 M ha	5,000,000
Ethanol – 3 M ha sugarbeet + s. sorghum	8,000,000
Jatropha – 10 M ha	8,000,000
Paradise Tree – 4 M ha	2,000,000
Other agro-forestry, medicinal herbs	4,000,000
Cotton & Textiles	12,000,000
Dairy, animal husbandry, fisheries	8,000,000
<b>Total</b>	<b>60,000,000</b>

# Organization for Rural Prosperity

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- Self Help Groups
- Contract Farming
- Rural Information Centers
- Farm Schools

# Farm Schools cum Extension

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*Objective: double farm yields in 3 years*

- Lead farmers act as paid field training & extension staff for the contractor
- Lead farmers run Farm Schools on village lands
- Demonstrate methods on farmers' lands
- Train farmers & disseminates information
- Operate or link to Village Information Centre
- Link to soil test labs
- Link to agro-service centres

# Service Sector

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- USA: provides 80% of jobs
- India:
  - Grew by 60M jobs in 18 yrs
  - Rose from 25% to 32% of total employment
- High potential fields
  - Skilled self-employment – carpenters, plumbers, mechanics, etc.
  - Tourism
  - Transport, storage, communication
  - Education
  - Health care
  - Financial services
  - Internet-based activities

# Issues for Study

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- Natural job creation
  - How many jobs are being created?
  - In which sectors & fields?
  - By what process?
  - How can the natural process be magnified and accelerated?
  - How are rural migrants absorbed in the cities?
- Occupational demand
  - Identify high growth occupational categories at all levels
  - Measure growth in pay/income levels by category
- Emerging Activities
  - Identify emerging occupations in all sectors,
    - Farm managers & Soil technicians
    - Servicing for cell phones, ACs, computers, VCDs, etc.
    - Home delivery, floor cleaner, masseuse
- Skills for national development
  - Compile a complete list of skills needed for India's development to next higher level
- Job creation in other countries
  - Study which job categories grew rapidly in US during a comparable period?