Agriculture and Land Use in Nagaland

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Population & Geography

- Area: 16,579 km²
- Population: 1.98 million
- Rural Population: 71%
- Tribal (16 tribes)
- 60 dialects
Climate & Topography

- Precipitation: ~ 1000 to 3000 mm
- Temperature:
  Summer ~ 15 - 30 °C
  Winter ~ 5 - 25°C
- Elevation:
  ~ 194 to 3048 m
Contributors to Economy Growth

- Agriculture: 23%
- Services: 44%
- Industry: 33%

Distribution of workers (2011 census)

Land Use & Ownership

- 70% cropland is in hilly terrain
- Land ownership
  ~ 88% private/community
  ~ 12% government

Govt. of Nagaland, 2012; Directorate of Economics and Statistics, 2013
Cropping Systems

Shifting cultivation (Jhum)
Wet rice cultivation
Jhum Cycle

1. Slashed forest: Dec/Jan
2. Burning: Feb
3. Seedbed prep/planting: March
4. Weeding: Mid-season
5. Harvest: Aug/Sept
6. After 2 or 3yrs fallow
Alder-based Jhum

Photo: Cairns and Brookfield, 2011
Wet Rice Cultivation

Cairns and Brookfield, 2011
Food Production & External Input

• Average rice production (2013)
  – Jhum ~ 1.9 MT ha\(^{-1}\)
  – Wet rice ~ 2.5 MT ha\(^{-1}\)
    • Rice variety
    • Fertility

• Fertilizer Use (2013)
  ~ 6 kg ha\(^{-1}\)
  – N:P:K consumption ratio 3:2:1

Area occupies by different crops

Soil Conservation

Photos: Changkija
Zabo: Nutrient & Water Management

Photos: Changkija
Post-harvest: Crop & Field Management
Sustainability

- Land use - Food security
- Infrastructure
- Economic Income
Thank You

Dr. Karlyn Eckman

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Question?