The Greening of Yap: The Transformative Reemergence of Subsistence Agriculture and Its Impact on Rural Community Development In Yap, FSM

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Yap Statistics

- Land Area: 45.6 square miles
- Population: 11,241
- Population Percentage of FSM: 10.5%
- Population Density per Square Mile: 243
- Economically Active People in Yap: 4,964
- Economically Active People in FSM: 15,907
Population, Population Density and Economically Active in FSM: 2000

<table>
<thead>
<tr>
<th>Area</th>
<th>Population</th>
<th>Population Density</th>
<th>Employed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chuuk State</td>
<td>53,595</td>
<td>1,094</td>
<td>11,979</td>
</tr>
<tr>
<td>Kosrae State</td>
<td>7,686</td>
<td>179</td>
<td>1,864</td>
</tr>
<tr>
<td>Pohnpei State</td>
<td>34,486</td>
<td>261</td>
<td>10,368</td>
</tr>
<tr>
<td>Yap State</td>
<td>11,241</td>
<td>244</td>
<td>4,964</td>
</tr>
<tr>
<td>FSM Total</td>
<td>107,008</td>
<td>395</td>
<td>29,175</td>
</tr>
</tbody>
</table>


Notes: (1) Population density is number of residents per square mile.
(2) Employed in formal employment, self-employment and economically active in subsistence production.
POPULATION of FSM


Food accounted for the largest percentage of total expenditure in all the income classes. However, households with income below $10,000 have a much higher share, more than 40 percent of total expenditure. Comparison of the expenditure pattern by state showed that Chuuk has the highest food expenditure share at about 47 percent followed by Yap with 46 percent, Kosrae at 39 percent. Pohnpei had the lowest share, at 32 percent.

Source: HIES Report 2005
Yap state is rather unique in that it has the highest proportion of its food expenditures on fruits and vegetables at 29% (tied with fish and seafood), while other states of the FSM people spend only 22% or less.
Wages and salaries were the major source of household income in all the states. The highest proportion is in Pohnpei where 55 percent of its total household income came from wages and salaries. All the states also derived a significant amount of their income from subsistence activities, accounting for 29% in Yap, down from 40.7 percent in Yap since 1998. All other states in the FSM have had similar drops in subsistence activities. Which have resulted from growths in other areas.
## Average Household Income and Expenditure For 2005

<table>
<thead>
<tr>
<th>State</th>
<th>Average Income</th>
<th>Average Expenditure</th>
<th>Average Dissavings</th>
</tr>
</thead>
<tbody>
<tr>
<td>FSM</td>
<td>$13,421</td>
<td>$12,829</td>
<td>$592</td>
</tr>
<tr>
<td>Yap</td>
<td>$15,616</td>
<td>$17,640</td>
<td>-$2,024</td>
</tr>
<tr>
<td>Chuuk</td>
<td>$10,955</td>
<td>$11,398</td>
<td>-$476</td>
</tr>
<tr>
<td>Pohnpei</td>
<td>$15,593</td>
<td>$12,936</td>
<td>$2,657</td>
</tr>
<tr>
<td>Kosrae</td>
<td>$12,842</td>
<td>$11,778</td>
<td>$1,064</td>
</tr>
</tbody>
</table>

Source: HIES Report 2005, pgs.8,14,16.
Traditional Shifting Cultivation

Traditional cultivation employs slash and burn techniques, followed by a fallow period of several years.
Traditional Mixed Agro-Forestry

Traditional cropping employs mixed agro-forestry, with a variety of crops ranging from pineapple, papaya, yams, sweet potato, banana, taro, casava, breadfruit and other tree and ground crops.
Modern Techniques and Crops
Modern Techniques and Crops
Farmer Market in Colonia, Yap
In Search of Sustainability

- Originally a UN project, it required shipped-in pig chow and failed. However later reborn locally farmers fed pigs copra and local foods and it became successful and sustainable.
Conclusions:

• Changes in economic activities have resulted in a reemergence of the importance of producing what were once subsistence foods.

• While demands for traditional foods remain the highest, newly introduced crops, such as tomatoes, cucumbers, herbs and fruits are gaining in demand as well. This has resulted in the requirement to adopt new production techniques.

• Due to the geographical logistics of small island states like Yap, there are times when traditional methods remain the only viable and sustainable alternative.
Thank You - Kammagar