

1. Summary of the present status of villages in NTB

Background

West Nusa Tenggara Province (hereinafter referred to as NTB), composed of Lombok and Sumbawa islands, is characterized by its dry climate and scarcity of water resources. Because of the insufficient water, productivity of agriculture, the main industry, remains low and it is estimated that more than 30% of the population is living under the poverty line. Many of the farmers harvest rice only in rainy season primarily for self-consumption and raise Bali cattle for meager cash income.

Under the circumstances, the government of Indonesia is trying to alleviate the poverty in the Province by enhancing livestock through technology transfer as well as satisfying the domestic needs for beef increasing in recent years. When the livestock is enhanced successfully in the Province, and as the number of the cattle raised increases, the income of farmers is expected to increase.

2. The Results of the Field Studies and the Discussions

The Study Team stayed in NTB from August 25 until September 13, 2005. During its stay, the Team conducted various activities such as data collection, visit to relevant organizations and had a series of discussion with DINAS staff as well as field studies.

2.1 Schedule of the Field Studies

Field study was executed in 10 villages (farmers' groups) in NTB from August 29 to September 12. In each inspection site, the Study Team in collaboration with relevant Provincial and District DINAS staff conducted semi-structured interview surveys targeting members of farmers' group selected by the provincial and district DINAS, the selection of which villages are based on degree of water availability and the presence of cattle raising farmers.

| Date | Visited Farmers' Group |
|--------------|---|
| August 29 | Bunga Lestari in Desa Kalijaga, Kec. Aikmel, EAST LOMBOK |
| August 30 | Makmur, Desa Murbaya, Kec Pringga Rata, CENTRAL LOMBOK |
| August 30 | Kebon Ree in Desa Babusalam, Kec. Genung, WEST LOMBOK |
| August 31 | Patuh Angen in Desa Bilerando, Kec. Praya Timur, CENTRAL LOMBOK |
| September 1 | Lembah Pedek I, in Desa Akar Akar, Kec. Bayan, WEST LOMBOK |
| September 3 | Lantano in Desa Teke, Kec. Belo, BIMA |
| September 4 | Depa Merta Sari in Desa Banggo, Kec. Manggalewa, DOMPU, |
| September 5 | Senap Semu in Desa Marga Karya, Kec. Moyohulu, SUMBAWA |
| September 6 | Kemang Setange in Desa Karang Dima, Kec. Labuhan Badas, SUMBAWA |
| September 7 | Patuhu Gati, in Desa Ambangan, Kec. Labuhan Haji, EAST LOMBOK |
| September 9 | Makmur, Desa Murbayand Bunga Lestari in Desa Kalijaga (2 nd visit) |
| September 10 | Lantano in Desa Teke and Banggo Manggalewa (2 nd visit) |
| September 12 | Patuh Angen in Desa Bilerando (2 nd visit) |

2.2 Results and findings of the Studies

(1) Rainfall

Lombok Island

Annual rainfall in NTB in regions range between 691 and 2,712 mm/year based on the annual rainfall data 2002 obtained from the Lombok Meteorological Station at Mataram Airport. In Lombok, as the Mount Rinjani, 3,726m high, is located slightly to the north east of the geographical center of the island, the magnitude of rainfall is gradually decreasing from its summit downwards to the island's coastal line.

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The mountain foot belt is covered with paddy fields utilizing water conveyed through irrigation canals and natural river systems, etc. Desa Merubaya and Desa Babusalam fall on the belt and there were no serious water resource problems were found. As compared with the two villages, access to water resources in Desa Kaiijaga is limited due to hilly topography and undeveloped irrigation systems.

Near the coastal line, especially north and eastern parts of the island are very dry. In both Desa Bilerando and Desa Akar Akar, access to water is very limited and agriculture is completely rain-fed and conducted only in rainy season.

Table 1. Annual Rainfall, Lombok (2002)

| Month | Mataram | Tanjung | Sekoton g | Bayan | Mujur | Mantang | Dsan Lekong | Sepapan | Sambelia |
|-----------|---------|---------|--------------|-------|-------|---------|----------------|---------|----------|
| January | 125 | 868 | 146 | 350 | 314 | 407 | 291 | 182 | 110 |
| February | 292 | 777 | 384 | 762 | 305 | 655 | x | 263 | 553 |
| March | 133 | 336 | 274 | 51 | 131 | 385 | 86 | 31 | 254 |
| April | 83 | 209 | 184 | - | 120 | 160 | 79 | 57 | 17 |
| May | 146 | 3 | 11 | - | - | - | 0 | - | - |
| June | 1 | - | 3 | - | - | - | 0 | - | - |
| July | 5 | - | - | - | - | 5 | - | - | - |
| Augst | 0 | - | - | - | 0 | - | - | - | - |
| September | - | 4 | - | - | 12 | 4 | - | - | - |
| October | 52 | 0 | 10 | - | 17 | 27 | 13 | - | - |
| November | 436 | 116 | 181 | 85 | 297 | 553 | 190 | - | 150 |
| Desember | 286 | 166 | 455 | x | 236 | 516 | 203 | 158 | 63 |
| Total | 1,559 | 2,479 | 1,648 | 1,248 | 1,432 | 2,712 | 862 | 691 | 1,147 |

Remarks: X: No data available / broken device, 0; Rainfall less than ≤ 0.4 mm, -; No rainfall

Sumbawa Island

Rainfall is even less in Sumbawa as is shown in the Table 2. Annual rainfall in Sumbawa ranges between 871 and 1,526 mm/year based on the same rainfall data. Out of four villages visited, only Karang Dima is relatively abundant with water, and in the remaining three villages, namely, Desa Teke, Marga Karya and Karang Dima, water resources are limited in, only rain-fed agriculture is performed.

Table 2. Annual Rainfall, Sumbawa (2002)

| Month | Sumbawa | Taliwang(01) | Lunyak | Hu'u | Kilo | Montabaru | Bima | Bolo | Sape |
|-----------|---------|---------------|--------|-------|-------|-----------|------|------|-------|
| January | 205 | 144 | 324 | 169 | 93 | 286 | 181 | 240 | 77 |
| February | 478 | 146 | 273 | 367 | 221 | 18 | 252 | 254 | 162 |
| March | 127 | 97 | 40 | 118 | 179 | 17 | 234 | 114 | - |
| April | 101 | 274 | 27 | 219 | 60 | 11 | 21 | 25 | - |
| May | 1 | - | - | - | - | - | 2 | - | - |
| June | - | - | - | - | - | - | - | - | - |
| July | 0 | 2 | 1 | - | - | - | 4 | - | - |
| Augst | - | - | - | - | - | - | 1 | - | - |
| September | - | 22 | 16 | - | - | - | 0 | - | - |
| October | - | 29 | - | - | - | - | 0 | - | - |
| November | 66 | 129 | 68 | 78 | 192 | 270 | 63 | 68 | 35 |
| Desember | 372 | 181 | 134 | 115 | 356 | 450 | 212 | 170 | 43 |
| Total | 1,350 | 1,024 | 883 | 1,066 | 1,101 | 1,052 | 970 | 871 | 1,526 |

Remarks: X: No data available / broken device, 0; Rainfall less than ≤ 0.4 mm, -; No rainfall

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