### CHAPTER 5 LAND USE

Land use refers to the major classification of the use of the different parcels of land in the holdings. All land operated by agricultural holdings is classified as either agricultural land or non-agricultural land. The total area of all agricultural holdings in the country has been increasing.

Census 1961/62 registered an area of 1,685 thousand hectares of all agricultural holdings. In 2001/02 the area increased to 2,654 thousand hectares - an increase of 63.3 percent in the span of 40 years. In 1961/62 about 1,626 thousand hectares out of the total land operated by agricultural holding was agricultural land. This increased to 2,498 thousand hectare of agricultural land operated in 2001/02. It is an increase of 53.6 percent over the 40 years period.

Description

Total area of holding

area of holding

Non agricultural land

of holding

Agricultural land as % of total

Arable land as % of total area

Non agricultural land as % of total area of holding

Agricultural land

Arable Land

The area of arable land was 1,5929 thousand hectares in 1961/62. It increased to 2,357 thousand hectares in 2001/02, an increase of 48.1 percent in forty years. It was observed that land under permanent pasture had been decreasing. In 1981/82 area under permanent pasture was 42.5 thousand hectares which decreased to 19.7 thousand hectare in 2001/02.

In the case of non-agricultural land, the area increased from 59 thousand hectares in 1961/62 to 204.5 thousand hectares in 1991/92. However, there was a sudden decrease in the area of non-agricultural land from 204.5 thousand hectares to 156.3 thousand hectares between 1991/92 and 2001/02. Arable land occupies only about 18 percent or 2,654 thousand hectares in 2001/02 of the total land area of Nepal.

Census year

**Table 5.0 Summary Statistics** 

1961/62

1,685.4

1,626.4

1,591.9

96.5

94.5

59.0

3.5

1971/72

1,654.0

1,592.3

1,567.0

96.3

94.7

91.7

3.7

 1981/82
 1991/92
 2001/02

 2,463.7
 2,597.4
 2,653.9

 2,359.2
 2,392.9
 2,497.7

 2,287.5
 2,323.4
 2,357.0

 95.8
 92.1
 94.1

89.5

204.5

7.9

88.8

156.3

5.9

92.8

104.5

4.2

(Number in '000 hectares)

### 5.1 Land use types

Land use refers to the major classification of the use of the different parcels of land in the holding. For purposes of the Agriculture Census, land operated by the holding is classified according to major land uses as agricultural land and non-agricultural land.

Agricultural lands are generally classified into two categories, the crop land and the ponds. Crop land is further classified into three categories, namely: arable land, land under permanent crops and land under permanent meadows and pastures.

On the other hand, non-agricultural lands are those lands that are part of the holding that comprise woodland or forest (not commercial) and all other land, unused and undeveloped potentially productive land and all other land in the holding not elsewhere classified including the home lot of the holder.

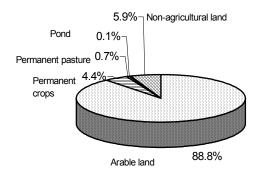
The total area of all agricultural holdings in the country had been increasing every census year from 1.6854 million hectares in 1961/62 to 2.6539 million hectares in 2001/02. Because of this increase, other major land use categories correspondingly since increased in area 1961/62. Specifically the areas of arable land and land under permanent crops have been increasing since 1961/62 up to 2001/02. On the other hand, it was observed that land under permanent pasture had been decreasing in area starting 1981/82 from 42.5 thousand hectares to only 19.7 hectares in 2001/02.

For non-agricultural land, the area had been increasing from 59 thousand hectares in 1961/62 to 204.5 thousand hectares in 1991/92. However, in 2001/02 there was a sudden decrease in the area of non-agricultural land to 156.3 thousand hectares. Probably the source of the

decrease in area is in the woodland and forest where the area abruptly decreased from 108.8 thousand hectares in 1991/92 to 37.2 thousand hectares in 2001/02, a decrease of about 66%. The plausible explanation of this decrease is the shifting of the use of the land. It is possible that some of the increase in the area of land under permanent crops may have come from this land use category.

TABLE 5.1 shows that there was a sudden increase in the land under permanent crops between 1991/92 and 2001/02 from 29.4 thousand hectares to 117.5 thousand hectares. Some of the increases may have come from non-agricultural land, some may have come from land under permanent pasture.

FIGURE 5.1: LAND USE CATEGORIES, NEPAL, 2001/02



While it was observed that there was actual increases in the area of land under the different land use categories, we can say that land use pattern in Nepal seems to be changing slowly relative to the different categories of land uses. Upon closer examination of the different land uses, there was a downward trend in the proportion of arable land relative to the total area of the holding from 94.5% of the total land holding in 1961/62 to 88.8% in 2001/02. This finding implies that while agricultural land area is steadily increasing through the years, the increase in area was not enough to maintain its relative importance to the total area of the holding.

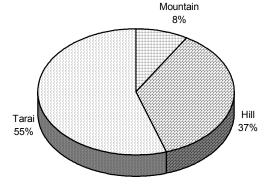
Some of the increases may have been diverted to other land uses of less importance. For instance, under the "Other land" category that belongs to non-agricultural land, the increase can be considered sizeable from 95.7 thousand hectares in 1991/92 to 119.1 thousand hectares in 2001/02 or an increase of 24.4%.

The changing pattern in land use may be seen in the percentage distribution for each census year in TABLE 5.1 where the downward trend is obvious for the arable land where land under temporary crops belongs. On the other hand, the increasing trend for the land under permanent crops is also very evident. In fact, the proportion of the land under permanent crops among female holders is extraordinarily high. This means that more female holders are engaged in tree farming, proportionally than their male counterparts.

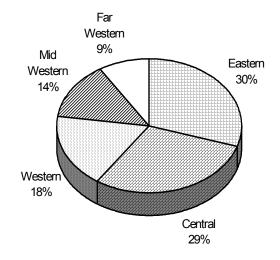
#### 5.2 Arable land

Arable land comprises all land under cultivation to temporary crops. This type of agricultural land is very important to the attainment of food self-sufficiency in Nepal. There was a minimal increase in the area of arable land between 1991/92 and 2001/02 from 2.323 million hectares to 2.357 million hectares or an increase of 1.4% in a period of ten years. There are four categories of arable land: land under temporary crops, land under temporary meadows, land under temporarily fallow

## FIGURE 5.2: DISTRIBUTION OF ARABLE LAND, 2001/02

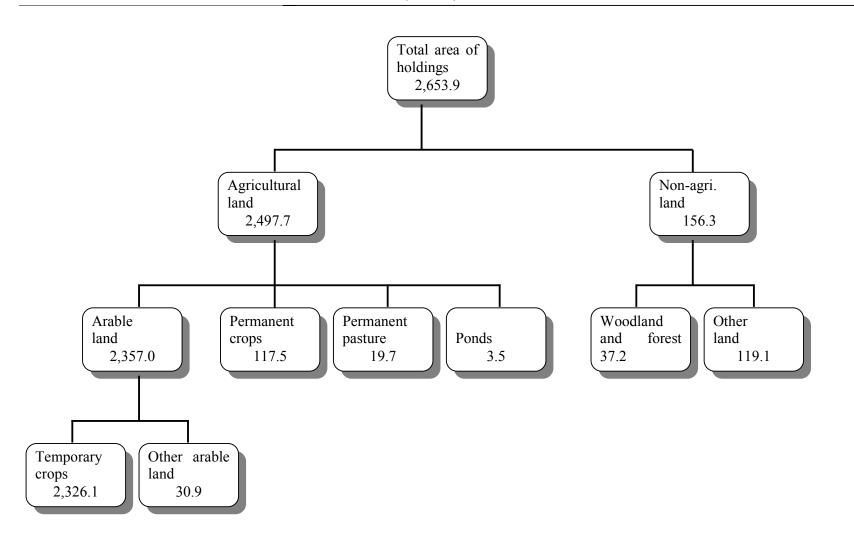


and other arable land. The land under temporary crops is considered the most important category of arable land because this is the physical area of land where annual crops were grown during the reference period. If the growing cycle of crops is for a few months only, for



example vegetables, the land can be used as many times as the growing cycle of the crop permits.

FIGURE 5.3 LAND USE, NEPAL, 2001/02 ('000 ha)



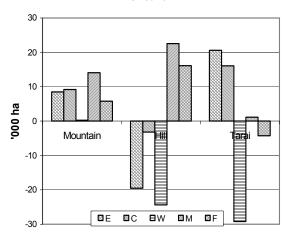
Arable land in Nepal occupies only about 16% or 2.654 million hectares of the total land area of 14.718 million hectares in 2001/02. Hill ecological belt reported the biggest land area of 6.1345 million hectares but Tarai belt reported the widest area of arable land physically and proportionally with 38% in 2001/02, see TABLE 5.2. The Mountain belt reported the lowest proportion of arable land (3.9%) relative to its total area of 5.182 million hectares, which is second largest among the three belts. The total land area of Tarai is a little more than half that of the Hill belt. This condition is expected because Tarai lies on the southern part of the country and considered as an extension of the Gangetic plains of India that normally forms a low flat land.

Moreover, Tarai belt has reported 1.294 million hectares of arable land that was 54.9% of the total area of arable land in Nepal in 2001/02. In 1991/92 Tarai had a higher proportion of arable land which was 55.5% of the total. The Hill belt also experienced a slight decrease to its position in 1991/92 from 37% to 36% in 2001/02. The Mountain belt seemed to have increased its arable land relative to the two belts where in 1991/92 the share of Mountain belt to the total arable land was only 7% and this share increased to 8.5% in 2001/02 see TABLE 5.2.

Of the 122.6 thousand hectares of arable land that female holders reported in 2001/02, Hill belt holders reported the highest proportion of arable land in relation to the total arable land in the area at 7% compared with 5.4% in Mountain and 3.3% in Tarai. Also in terms of actual arable land area, Hill belt female holders reported the biggest with 67.2 thousand hectares compared with 44.1 thousand hectares in Tarai belt and 11.2 thousand hectares in the Mountain belt see TABLE 5.2a.

The arable land operated by the female holder was only 0.83% of the total land area of Nepal. By ecological belt, the Mountain belt female holdings have only 0.22% of their arable land to the total arable land. Tarai belt and Hill belt reported higher proportions of 1.30% and 1.10%, respectively.



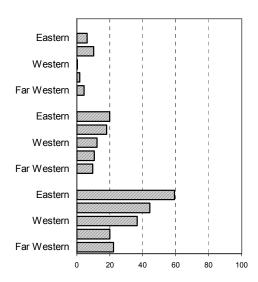


Eastern and Central development regions claim about 59.4% or 1.3995 million hectares of the total arable land of 2.347 million hectares in Nepal with Eastern region registering the biggest area of 709.2 thousand hectares followed closely by Central region with 690.3 thousand hectares. These two regions cover a total of 35 districts, 16 districts under Eastern region and 19 districts in Central region. The next largest region is Western region with 421 thousand hectares despite its coverage of 16 districts. Far-Western development region reported the least area of arable land at 206.7 thousand hectares and second to the smallest area in 2001/02 was Mid-Western region with 329.7 thousand hectares. These two regions reporting the smallest area of arable land cover also the least number of districts, 15 districts for Mid-Western region and 9 districts for Far-Western region.

The percentage of arable land to the total land area of the region explains the area of arable land found in each development region, see TABLE 5.3.

Area-wise, Mid-Western region has the largest land territory that occupies 28.8% of the total land area of the country. However, its arable land is only 7.78% of the total since most of the districts in this region are mountainous like Dolpa, Jumla, Kalikot, Mugu and Humla.

FIGURE 5.5: ARABLE LAND, 2001/02, PERCENT OF LAND AREA



Land use pattern in development regions is depicted in the percentage distribution of the different land use categories in TABLE 5.3.

Of the five developing regions, only Central region registered a proportional decrease of its total agricultural land between 1991/92 and 2001/02. However, the actual physical area of the agricultural land increased from 685.2 thousand hectares to 690.3 thousand hectares, an increase of only 0.74% (less than 1%) thus the decrease in its importance relative to other land uses.

Examining the land use structure of each developing region, it is Western region that

exhibited a low proportion of arable land of only 82.2% in 2001/02 from 83.7% in 1991/92 which was usually used in growing annual crops. However, it was this region where the proportion of land under permanent crops was highest comparatively at 10.1% compared with the next highest of 4% as reported in Eastern region. Land under permanent crops in Western region in 1991/92 was only 1% of the total area of holdings.

For female holders, the same pattern is observed in Western region that is different from the land use structure of the other four regions. The proportion of arable land reported by the female holders was only 77.5% of the 48 thousand hectares area of the holdings but the proportion of land under permanent crops registered at 12.7%. In physical terms, female holders in Western region operated 6.09 thousand hectares or about 68% of the 8.94 thousand hectares of land under permanent crops reported by all female holders in Nepal.

### **5.3** Percent of land for cultivation

As earlier mentioned, arable land is very important in attaining food self-sufficiency in Nepal since the land under temporary crops is under this category. The other categories of arable land are potential areas for raising crops. For instance, land under temporarily fallow, while this land is not actually cultivated during the current year, it is possible that in the next cropping year the land may be planted. Usually land under temporarily fallow is being left uncultivated during a particular year to restore the fertility of the soil or for some other reasons.

In the ecological-development region matrix shown in TABLE 5.4, all development regions under the Mountain belt increased in the area of arable land. This situation cannot be said of the regions in the two other belts. In Hill belt, three regions registered a decrease in the arable

land, namely: Eastern, Central and Western while in Tarai belt two regions registered a decrease, namely: Western and Far-Western regions. These decreases can be seen in the percentage distribution of arable land by development region cross-classified with the ecological belt.

Arable land as percent of the total land by sub-ecological belt registered an increase in the Mountain belt area from 3.1% in 1991/92 to 3.9% in 2001/02. Despite the decreasing some arable land in development regions in Tarai belt, there was still a slight improvement in the percentage of arable land to the total from 37.9% in 1991/92 to 38.0% in 2001/02. It is in the Hill belt where a slight decrease in the percentage of arable land was noted from 14.2% in 1991/91 to 14.1% in 2001/02

Which developing regions were contributing to the increases in Mountain and Tarai belts and which of the regions were contributing to the decrease in the percentage of arable land in Hill belt, TABLE 5.5 shows the data. All regions in Mountain belt had contributed to the increase in the percentage of the area of arable land to the total land area while in Tarai belt only Eastern, Central and Mid-Western regions contributed to increases in the area of the arable land. For Hill belt, Eastern, Central Westerns regions contributed to the decrease in the percentage of arable land in this belt.

# 5.4 Land use pattern in small and large holdings

Of the 3.3374 million holdings, 3.306 million holdings reported of cultivating temporary crops. This is 99.1% of all holdings in the country of which 46.9% are found in holdings with less than half a hectare while only 10.7% are among the large-sized farms of 2 hectares and over.

The land use pattern among the small land holders for other agricultural land and woodland and forest seems to be different from the large land holder. For instance, the number of holdings with permanent crops is only 10.3% of the total while the large holdings reported 38.4% of the total as having permanent crops. Also holdings with woodland and forest comprised only 2.1% among the small-sized holdings compared with 15.4% among the large holdings. Even in the proportion of the number of holdings with ponds and permanent pasture, the small holdings are less proportionally when compared with the large holdings.

The same land use pattern was noted among the female and male holders where the number of holdings engaged in other agricultural activities and woodland and forest was much less than the large holdings, see TABLE 5.6.

### 5.5 Wet and dry land

Knowing whether the land is wet land or dry land is important not only to planners but also to the farmers as well.

Wet land refers to low land where water remains on the surface or on the upper soil layer, making the soil suitable for main paddy cultivation while dry land refers to any other land than the wet land; i.e. land not suitable for main paddy cultivation.

For Nepal, where it used to be a rice exporting country, knowing the proportion of wet land relative to the total land available can provide good data for planning the cultivation of rice as a main crop. The information can also provide an idea of the extent of area under irrigation both artificially and naturally. Wet land includes also lands that depend on their water supply from rainfall but adequate enough to be able to cultivate main paddy up to harvest. This kind of land has a higher water holding capacity than other

lands that enable the retention of standing water longer. The wet land is usually classified as lowland while the dry land is usually classified as upland.

Nepal has a total area of 1.6062 million hectares of wet land representing 60.5% of the total area of holdings in the country.

These wet lands are mostly found in the Tarai belt with 1.206.9 million hectares or 75.1% of the total area of wet land. Since wet land is usually found in flat terrain or areas, which is in the Tarai belt, it is not unexpected therefore that the Mountain belt and the Hill belt would yield a low proportion of wet land. For Mountain belt, its share of the wet land is only 71.8 thousand hectares or 4.5% of the total while Hill belt reported a much higher share of 327.5 thousand hectares or 20.4% of the total.

Among female holders, wet land consisted of 68.8 hectares or 47.8% of the total area of female holdings of 143.8 thousand hectares. Of this area of 68.8 thousand hectares, 39.8 thousand hectares or 57.8%

are found in Tarai; and 25.1 thousand hectares or 36.5% are in the Hill belt. Only 4 thousand hectares were found in Mountain belt, which is 5.8% of the total wet land operated by female holders.

Among the development regions, Eastern and Central regions reported the highest percentage of wet land of 65.2% and 67.1%, respectively. The aggregate area for the two regions comprised almost two-thirds of the total area of wet land in the country. Far Western region reported 59.1% proportion of wet land to the total area of holding while Mid-western reported the lowest proportion of 44.9%.

The proportion of the area of wet land relative to the total area of the holding was reported by the large holdings at 72.6% while the small holdings reported a proportion of 48.5%. The pattern is the same for the female and male holdings, except that in the case of the female holding only 60.8% of the total area are wet land compared with the proportion of 72.9% among the large-sized male holdings, see TABLE 5.8.

TABLE 5.1: AREA OF LAND HOLDINGS BY LAND USE, NEPAL, 1961/62 TO 2001/02

(In thousand hectares except Percent)

| Land use 1961/62 1971/72 198  |                                |                      | 2001/02           |                      |  |  |
|---|--------------------------------|----------------------|-------------------|----------------------|--|--|
| Land use 1961/62 1971/72 198  |                                |                      | 2001/02           |                      |  |  |
|   | 1/82 1991/92                   | All<br>Holdings      | Female holding    | Male<br>holding      |  |  |
|   |                                |                      |                   |                      |  |  |
| Total area of holdings 1,685.4 1,654.0 2,465                                      | 3.7 2,597.4                    | 2,653.9              | 143.8             | 2,510.1              |  |  |
| Agricultural land 1,626.4 1,592.3 2,359   | 9.2 2,392.9                    | 2,497.7              | 133.1             | 2,364.6              |  |  |
| Arable land 1,591.9 1,567.0 2,28  | 7.5 2,323.4                    | 2,357.0              | 122.6             | 2,234.4              |  |  |
| Land under temporary crops 1,550.5 1,537.1 2,250<br>Other arable land 41.4 29.9 3 | 0.2 2,284.6<br>7.3 38.8        | 2,326.1<br>30.9      | 120.5<br>2.1      | 2,205.6<br>28.8      |  |  |
| Land under permanent pasture 22.3 10.3 42   | 9.2 29.4<br>2.5 36.9<br>na 3.3 | 117.5<br>19.7<br>3.5 | 8.9<br>1.5<br>0.1 | 108.6<br>18.2<br>3.4 |  |  |
| Non-agricultural land 59.0 61.7 104   | 4.5 204.5                      | 156.3                | 10.7              | 145.6                |  |  |
|   | 5.0 108.8<br>9.5 95.7          | 37.2<br>119.1        | 2.7<br>8.0        | 34.5<br>111.1        |  |  |
| Total land area of Nepal 14,718.1 14,718.1 14,718                                 | 8.1 14,718.1                   | 14,718.1             |                   |                      |  |  |
| % of arable land to Total land area 10.8 10.6 15                                  | 5.5 15.8                       | 18.0                 |                   |                      |  |  |
|   | Percent                        |                      |                   |                      |  |  |
| Total area of holdings 100.0 100.0 100  | 0.0 100.0                      | 100.0                | 100.0             | 100.0                |  |  |
| Agricultural land 96.5 96.3 95  | 5.8 92.1                       | 94.1                 | 92.6              | 94.2                 |  |  |
| Arable land 94.5 94.7 92  | 2.8 89.5                       | 88.8                 | 85.3              | 89.0                 |  |  |
|   | 1.3 88.0<br>1.5 1.5            | 87.6<br>1.2          | 83.8<br>1.4       | 87.9<br>1.1          |  |  |
| Land under permanent pasture 1.3 0.6  | 1.2 1.1<br>1.7 1.4<br>0.1      | 4.4<br>0.7<br>0.1    | 6.2<br>1.0<br>0.1 | 4.3<br>0.7<br>0.1    |  |  |
| Non-agricultural land 3.5 3.7   | 4.2 7.9                        | 5.9                  | 8.1               | 5.8                  |  |  |
|   | 0.6 4.2<br>3.6 3.7             | 1.4<br>4.5           | 1.9<br>6.2        | 1.4<br>4.4           |  |  |

Note: Details may not add up to total due to rounding.

TABLE 5.2: AREA OF LAND HOLDINGS BY LAND USE AND ECOLOGICAL BELT, 1991/92 AND 2001/02

(In thousand hectares)

|   |                            |                         |                            | (                          | asana neeta        | )                          |                             |                             |
|---|----------------------------|-------------------------|----------------------------|----------------------------|--------------------|----------------------------|-----------------------------|-----------------------------|
| I 1 I I   | Moun                       | tain                    | Н                          | ill                        | Tai                | rai                        | Ne                          | pal                         |
| Land Use  | 1991/92                    | 2001/02                 | 1991/92                    | 2001/02                    | 1991/92            | 2001/02                    | 1991/92                     | 2001/02                     |
| Total agricultural land   | 164.3                      | 207.7                   | 909.9                      | 959.9                      | 1,318.7            | 1,330.1                    | 2,392.9                     | 2,497.7                     |
| Arable land   | 162.3                      | 200.0                   | 871.3                      | 863.0                      | 1,289.7            | 1,294.0                    | 2,323.4                     | 2,357.0                     |
| Land under temporary crop<br>Other arable land                                  | os 158.7<br>3.7            | 197.2<br>2.9            | 848.2<br>23.1              | 844.4<br>18.5              | 1,277.7<br>12.1    | 1,284.5<br>9.5             | 2,284.6<br>38.8             | 2,326.1<br>30.9             |
| Land under permanent crops<br>Land under permanent pasture<br>Ponds             | 0.7<br>1.2<br>0.0          | 6.0<br>1.7<br>0.0       | 6.7<br>31.7<br>0.2         | 81.2<br>15.2<br>0.5        | 22.0<br>3.9<br>3.1 | 30.2<br>2.9<br>2.9         | 29.4<br>36.9<br>3.3         | 117.5<br>19.7<br>3.5        |
| Total non-agricultural land   | 12.5                       | 11.0                    | 136.3                      | 78.7                       | 55.6               | 66.6                       | 204.5                       | 156.3                       |
| Woodland and forest<br>Other land   | 5.7<br>6.8                 | 2.6<br>8.4              | 93.2<br>43.1               | 29.6<br>49.2               | 9.9<br>45.7        | 5.1<br>61.5                | 108.8<br>95.7               | 37.2<br>119.1               |
| Total area of holdings<br>Total land area<br>Arable land as % of total land are | 176.8<br>5,181.7<br>ea 3.1 | 218.7<br>5,181.7<br>3.9 | 1,046.2<br>6,134.5<br>14.2 | 1,038.6<br>6,134.5<br>14.1 | ,                  | 1,396.6<br>3,401.9<br>38.0 | 2,597.4<br>14,718.1<br>15.8 | 2,653.9<br>14,718.1<br>16.0 |

TABLE 5.2a: AREA OF LAND HOLDINGS BY LAND USE, ECOLOGICAL BELT OF FEMALE HOLDERS, NEPAL, 2001/02

(In thousand hectares except percent)

|                                     |         |       |         |       | ares except |       |          |       |
|-------------------------------------|---------|-------|---------|-------|-------------|-------|----------|-------|
|                                     | Mou     | ntain | Hi      | 11    | Tar         | ai    | Nepal    |       |
| Land use                            | Female  | % to  | Female  | % to  | Female      | % to  | Female   | % to  |
|                                     | holder  | total | holder  | total | holder      | total | holder   | total |
| Total agricultural land             | 11.5    | 5.5   | 76.2    | 7.9   | 45.3        | 3.4   | 133.1    | 5.3   |
| Arable land                         | 11.2    | 5.4   | 67.2    | 7.0   | 44.1        | 3.3   | 122.6    | 4.9   |
| Land under temporary crops          | 11.1    | 5.3   | 65.7    | 6.8   | 43.7        | 3.3   | 120.5    | 4.8   |
| Other arable land                   | 0.1     | 0.0   | 1.5     | 0.2   | 0.4         | 0.0   | 2.1      | 0.1   |
| Land under permanent crops          | 0.2     | 0.1   | 7.6     | 0.8   | 1.1         | 0.1   | 8.9      | 0.4   |
| Land under permanent pasture        | 0.1     | 0.0   | 1.4     | 0.1   | 0.03        | 0.0   | 1.5      | 0.1   |
| Ponds (actual area in hectares)     |         | •••   | 5.0     | 0.0   | 70.6        | 0.0   | 75.6     | 0.0   |
| Non-agricultural land               | 0.7     | 0.3   | 6.71    | 0.7   | 3.267       | 0.2   | 10.7     | 0.4   |
| Woodland and forest                 | 0.16    | 0.1   | 2.36    | 0.2   | 0.157       | 0.0   | 2.7      | 0.1   |
| Other land                          | 0.54    | 0.3   | 4.35    | 0.5   | 3.11        | 0.2   | 8.0      | 0.3   |
| Total area of holdings              | 12.2    | 5.9   | 82.9    | 8.6   | 48.6        | 3.7   | 143.8    | 5.8   |
| Total land area                     | 5,181.7 |       | 6,134.5 |       | 3,401.9     |       | 14,718.1 |       |
| Arable land as % of total land area | 0.22    |       | 1.10    |       | 1.30        |       | 0.83     |       |

TABLE 5.3: AREA OF LAND HOLDINGS BY LAND USE AND DEVELOPMENT REGION, NEPAL, 2001/02 AND 1991/92

(In thousand hectares) Development region Land use Western Mid West. Far West. Eastern Central Nepal Region Region Region Region Region 2001/02 Total area of holdings 795.5 750.2 512.1 370.7 225.4 2,653.92 Agricultural land 745.61 712.02 482.26 345.22 212.53 2,497.66 709.2 690.3 421.0 329.7 206.7 2,356.97 Arable land Land under temporary crops 701.2 683.2 415.7 324.5 201.5 2,326.12 Other arable land 8.07 7.07 5.27 5.20 5.25 30.86 173 32.2 517 117 46 117.48 Land under permanent crops 2.7 8.9 19.75 Land under permanent pasture 3.4 3.6 1.1 1.5 0.9 0.6 0.2 0.1 Ponds 3.5 % Agric land to total Agric land (Nepal) 29.85 28.51 19.31 100.0 13.82 8.51 Non-agricultural land 49.86 38.16 29.88 25.47 12.91 156.28 Woodland and forest 13.9 7.2 6.0 1.5 37.22 8.6 Other land 36.0 29.5 22.7 19.4 11.4 119.05 19.1 100.0 % Non-agric land to total non-agri (Nepal) 31.9 24.4 16.3 8.3 2,939.8 2,845.6 2,741.0 4,237.8 1.953.9 14.718.1 Total land area by region % land area to total land area (Nepal) 19.3 18.6 20.0 28.8 13.3 100.0 Arable land as % of total land area 24.92 25.18 14.32 7.78 10.58 16.01 1991/92 Total area of holdings 783.2 719.7 566.4 324.7 203.3 2,597.40 Agricultural land 718.9 685.2 499.6 298.4 190.8 2,392.9 Arable land 699.8 668.3 474.3 292.0 189.1 2,323.4 659.8 467.4 286.7 186.3 2,284.6 Land under temporary crops 684.4 Other arable land 8.5 38.8 15.4 6.9 5.3 2.8 12.3 9.4 29.4 Land under permanent crops 5.4 1.5 0.8 19.5 5.5 6.3 0.9 36.9 Land under permanent pasture 4.7 1.3 1.2 0.6 0.2 0.1 3.3 % Agric land to total Agric land (Nepal) 30.04 28.63 20.88 12.47 7.97 100.0 49.86 38.16 29.88 25.47 12.91 156.3 Non-agricultural land Woodland and forest 13.9 8.6 7.2 6.0 1.5 37.2 Other land 36.0 29.5 22.7 19.4 11.4 119.1 100.0 % Non-agric land to total non-agri (Nepal) 31.9 24.4 19.1 16.3 8.3 Total land area by region 2,845.6 2,741.0 2,939.8 4,237.8 1,953.9 14,718.1 % land area to total land area (Nepal) 100.0 19.3 18.6 20.0 28.8 13.3

24.59

24.38

16.13

6.89

9.68

15.79

Arable land as % of total land area

Continuation......

TABLE 5.3: AREA OF LAND HOLDINGS BY LAND USE AND DEVELOPMENT REGION, NEPAL, 2001/02 AND 1991/92

| Land use                     | Eastern | Central | evelopment<br>Western | Mid-West. | Far-West. | Nepal |
|------------------------------|---------|---------|-----------------------|-----------|-----------|-------|
|                              | Region  | Region  | Region                | Region    | Region    | P     |
|                              |         |         | ]                     | Percent   |           |       |
|                              |         |         | :                     | 2001/02   |           |       |
| Total area of holdings       | 100.0   | 100.0   | 100.0                 | 100.0     | 100.0     | 100.0 |
| Agricultural land            | 93.7    | 94.9    | 94.2                  | 93.1      | 94.3      | 94.1  |
| Arable land                  | 89.2    | 92.0    | 82.2                  | 89.0      | 91.7      | 88.8  |
| Land under temporary crops   | 88.1    | 91.1    | 81.2                  | 87.5      | 89.4      | 87.6  |
| Other arable land            | 1.0     | 0.9     | 1.0                   | 1.4       | 2.3       | 1.2   |
| Land under permanent crops   | 4.0     | 2.3     | 10.1                  | 3.1       | 2.0       | 4.4   |
| Land under permanent pasture | 0.3     | 0.5     | 1.7                   | 1.0       | 0.5       | 0.7   |
| Ponds                        | 0.02    | a       | 0.01                  | a         | a         | 0.13  |
| Non-agricultural land        | 6.3     | 5.1     | 5.8                   | 6.9       | 5.7       | 5.9   |
| Woodland and forest          | 1.7     | 1.1     | 1.4                   | 1.6       | 0.7       | 1.4   |
| Other land                   | 4.5     | 3.9     | 4.4                   |           | 5.0       | 4.5   |
|                              |         |         |                       | 1991/92   |           |       |
| Total area of holdings       | 100.0   | 100.0   | 100.0                 | 100.0     | 100.0     | 100.0 |
| Agricultural land            | 91.8    | 95.2    | 88.2                  | 91.9      | 93.9      | 92.1  |
| Arable land                  | 89.4    | 92.9    | 83.7                  | 89.9      | 93.0      | 89.5  |
| Land under temporary crops   | 87.4    | 91.7    | 82.5                  | 88.3      | 91.6      | 88.0  |
| Other arable land            | 2.0     | 1.2     | 1.2                   | 1.6       | 1.4       | 1.5   |
| Land under permanent crops   | 1.6     | 1.3     | 1.0                   | 0.5       | 0.4       | 1.1   |
| Land under permanent pasture | 0.7     | 0.9     | 3.4                   | 1.4       | 0.4       | 1.4   |
| Ponds                        | 0.2     | 0.2     | 0.1                   | 0.1       | a         | 0.1   |
| Non-agricultural land        | 6.4     | 5.3     | 5.3                   | 7.8       | 6.4       | 6.0   |
| Woodland and forest          | 1.8     | 1.2     | 1.3                   | 1.9       | 0.8       | 1.4   |
| Other land                   | 4.6     | 4.1     | 4.0                   | 6.0       | 5.6       | 4.6   |

a/Less than 0.01%

TABLE 5.3a: AREA OF LAND HOLDINGS BY LAND USE AND DEVELOPMENT REGION OF FEMALE HOLDERS, NEPAL, 2001/02

(In thousand hectares except percent)

|   | (In thousand hectares except percent) |                   |                   |                        |                        |                            |                            |                         |  |
|---|---------------------------------------|-------------------|-------------------|------------------------|------------------------|----------------------------|----------------------------|-------------------------|--|
|   |                                       |                   |                   | Developme              | ent Region             |                            |                            |                         |  |
| Land use  | Eastern<br>Region                     | Central<br>Region | Western<br>Region | Mid<br>West.<br>Region | Far<br>West.<br>Region | Total<br>Female<br>holders | Nepal<br>Total             | %<br>Female<br>to Total |  |
| Total area of holdings  | 38.73                                 | 31.78             | 48.02             | 17.20                  | 8.04                   | 143.77                     | 2,653.92                   | 5.42                    |  |
| Agricultural land   | 35.71                                 | 29.63             | 44.37             | 15.79                  | 7.50                   | 133.11                     | 2,497.66                   | 5.33                    |  |
| Arable land   | 34.09                                 | 28.96             | 37.25             | 14.96                  | 7.31                   | 122.56                     | 2,356.97                   | 5.20                    |  |
| Land under temporary crops<br>Other arable land   | 33.59<br>0.50                         |                   |                   | 14.70<br>0.25          | 7.12<br>0.19           | 120.49<br>2.07             | 2,326.12<br>30.86          |                         |  |
| Land under permanent crops<br>Land under permanent pasture<br>Ponds (actual area in hectares)       | 1.53<br>0.09<br>7.9                   | 0.19              | 1.03              | 0.69<br>0.15<br>0.7    | 0.15<br>0.05<br>1.3    | 8.94<br>1.51<br>75.7       | 117.48<br>19.75<br>3,452.5 | 7.65                    |  |
| % Agric land (Female)to total Agric land  | 1.43                                  | 1.19              | 1.78              | 0.63                   | 0.30                   | 5.33                       | 100.0                      |                         |  |
| Non-agricultural land   | 3.01                                  | 2.13              | 3.60              | 1.40                   | 0.53                   | 10.68                      | 156.28                     | 6.83                    |  |
| Woodland and forest<br>Other land   | 0.87<br>2.14                          |                   |                   | 0.38<br>1.02           | 0.06<br>0.47           | 2.68<br>8.00               | 37.22<br>119.05            |                         |  |
| % Non-agric land to total non-agri (Nepal)  | 1.9                                   | 1.4               | 2.3               | 0.9                    | 0.3                    | 6.8                        | 100.0                      |                         |  |
| Total land area by region % land area to total land area (Nepal) Arable land of female holders as % | 2,845.6<br>19.3                       | 2,741.0<br>18.6   | ,                 | 4,237.8<br>28.8        | 1,953.9<br>13.3        |                            | 14,718.1<br>100.0          |                         |  |
| of total land area  | 1.20                                  | 1.02              | 1.31              | 0.53                   | 0.26                   | 0.83                       |                            |                         |  |
|   |                                       |                   |                   | Percent                |                        |                            |                            |                         |  |
| Total area of holdings  | 100.0                                 | 100.0             | 100.0             | 100.0                  | 100.0                  | 100.0                      | 100.0                      |                         |  |
| Agricultural land   | 92.2                                  | 93.2              | 92.4              | 91.8                   | 93.3                   | 92.6                       | 94.1                       |                         |  |
| Arable land   | 88.0                                  | 91.1              | 77.6              | 87.0                   | 90.9                   | 85.3                       | 88.8                       |                         |  |
| Land under temporary crops<br>Other arable land   | 86.7<br>1.3                           |                   |                   | 85.5<br>1.5            | 88.6<br>2.3            | 83.8<br>1.4                | 87.6<br>1.2                |                         |  |
| Land under permanent crops Land under permanent pasture Ponds                                       | 4.0<br>0.2<br>0.02                    | 0.6               | 2.1               | 4.0<br>0.9<br>a        | 1.8<br>0.6<br>a        | 6.2<br>1.1<br>0.05         | 4.4<br>0.7<br>0.13         |                         |  |
| Non-agricultural land   | 7.8                                   | 6.7               | 7.5               | 8.2                    | 6.6                    | 3.7                        | 5.9                        |                         |  |
| Woodland and forest<br>Other land   | 2.2<br>5.5                            |                   |                   | 2.2<br>5.9             | 0.8<br>5.8             | 0.0<br>7.4                 | 1.4<br>4.5                 |                         |  |

TABLE 5.4: AREA OF ARABLE LAND BY SUB-ECOLOGICAL BELT, 1991/92 AND 2001/02

(In thousand hectares)

|                    |         |         |         | (III tilousai | iu nectares) |         |         |            |
|--------------------|---------|---------|---------|---------------|--------------|---------|---------|------------|
| Development region | Mou     | ntain   | Hi      | 11            | Та           | ırai    | То      | tal        |
| Development region | 1991/92 | 2001/02 | 1991/92 | 2001/02       | 1991/92      | 2001/02 | 1991/92 | 2001/02    |
|                    |         |         |         |               |              |         |         |            |
| Total              | 162.3   | 200.0   | 871.3   | 863.0         | 1,289.7      | 1,294.0 | 2,323.4 | 2,357.0    |
| Eastern            | 55.0    | 63.5    | 233.9   | 214.4         | 410.8        | 431.4   | 699.8   | 709.2      |
| Central            | 54.4    | 63.6    | 216.4   | 213.2         | 397.5        | 413.6   |         | 690.3      |
| Western            | 1.7     | 2.0     | 249.9   | 225.5         | 222.7        | 193.5   | 474.3   | 421.0      |
| Mid Western        | 23.0    | 37.1    | 122.6   | 145.1         | 146.4        | 147.5   | 292.0   |            |
| Far Western        | 28.2    | 34.0    | 48.6    | 64.7          | 112.3        | 108.0   | 189.1   | 206.7      |
|                    |         |         |         | Per           | rcent        |         |         |            |
| Total              | 100.0   | 0 100.  | 0 100   | .0 10         | 0.0 10       | 0.0 100 | 0.0 10  | 00.0 100.0 |
| Eastern            | 33.9    | 9 31.   | 7 26    | .8 2          | 4.8 3        | 1.9 33  | 3.3     | 30.1 30.1  |
| Central            | 33.:    | 5 31.   | 8 24    | .8 2          | 4.7 3        | 0.8 32  | 2.0     | 28.8 29.3  |
| Western            | 1.0     | 0 1.    | 0 28    | .7 2          | 6.1 1        | 7.3     | 5.0     | 20.4 17.9  |
| Mid Western        | 14.2    | 2 18.   | 5 14    | .1 1          | 6.8          | 1.4     | 1.4     | 12.6 14.0  |
| Far Western        | 17.     | 4 17.   | 0 5     | .6            | 7.5          | 8.7     | 3.3     | 8.1 8.8    |
|                    |         |         |         |               |              |         |         |            |

TABLE 5.5: ARABLE LAND AS PERCENT OF TOTAL LAND BY SUB-ECOLOGICAL BELT, 1991/92 AND 2001/02

(In percent)

| Development region | Mountain |         | H       | ill     | Tara    | ai      | Total   |         |
|--------------------|----------|---------|---------|---------|---------|---------|---------|---------|
| Development region | 1991/92  | 2001/02 | 1991/92 | 2001/02 | 1991/92 | 2001/02 | 1991/92 | 2001/02 |
| Total              | 3.1      | 3.9     | 14.2    | 14.1    | 37.9    | 38.0    | 15.8    | 16.0    |
| Total              | 3.1      | 3.9     | 14.2    | 14.1    | 37.9    | 38.0    | 13.8    | 16.0    |
| Eastern            | 5.3      | 6.1     | 21.8    | 19.9    | 56.5    | 59.3    | 24.6    | 24.9    |
| Central            | 8.7      | 10.1    | 18.3    | 18.1    | 42.6    | 44.3    | 24.4    | 25.2    |
| Western            | 0.3      | 0.3     | 13.6    | 12.3    | 42.3    | 36.8    | 16.1    | 14.3    |
| Mid Western        | 1.1      | 1.7     | 8.9     | 10.6    | 20.0    | 20.2    | 6.9     | 7.8     |
| Far Western        | 3.6      | 4.3     | 7.2     | 9.6     | 23.2    | 22.3    | 9.7     | 10.6    |
|                    |          |         |         |         |         |         |         |         |

TABLE 5.6: NUMBER AND PERCENT OF LAND HOLDINGS WITH EACH LAND USE TYPE BY SIZE OF HOLDING AND BY SEX OF HOLDER, NEPAL, 2001/02

(Number of holdings in thousand) Size of holding 2.0 ha 2.0 ha 2.0 ha Less Less Less 0.5 -0.5 -Land use Total than 0.5 and Total and than 0.5 and than Total 0.5 -< 2.0 <2.0 ha 0.5 ha above above ha above ha < 2.0 All holdings Female holders Male holders Arable land Temporary crops 1,549.2 1,503.3 253.8 3,306.3 166.0 92.9 7.7 266.6 1383.2 1410.4 246.1 3039.7 Total arable land 254.0 3,308.6 166.2 92.9 1384.9 1410.7 246.3 3041.8 1,551.1 1,503.6 7.7 266.8 Other agricultural land 162.7 357.6 97.6 618.0 21.9 27.6 3.0 52.5 140.8 330.0 94.6 Permanent crops 565.5 Permanent pasture 50.6 14.1 79.0 0.4 6.0 12.4 46.9 14.4 1.9 3.7 13.7 73.1 Ponds 1.8 9.2 8.7 19.6 0.1 0.2 0.6 8.9 8.5 19.1 0.4 1.7 Non-agricultural land Woodland and forest 32.5 133.3 39.0 204.8 3.6 10.9 1.5 16.0 28.9 122.4 37.5 188.8 Total land holdings 1,578.9 1,504.3 254.2 3,337.4 168.3 92.9 7.8 269.0 1410.6 1411.5 246.4 3068.4 Percent Arable land 98.1 99.9 99.9 99.1 99.9 99.9 99.1 Temporary crops 99.1 98.6 100.0 99.1 98.1 Total arable land 98.2 100.0 99.9 99.1 98.7 100.0 99.1 99.2 98.2 99.9 99.9 99.1 Other agricultural land 10.3 38.4 19.5 10.0 38.4 Permanent crops 23.8 18.5 13.0 29.7 38.7 23.4 18.4 Permanent pasture 0.9 3.4 5.6 2.4 1.1 3.9 4.8 2.2 0.9 3.3 5.6 2.4 Ponds 0.1 0.6 3.4 0.6 0.0 0.4 2.1 0.2 0.1 0.6 3.4 0.6 Non-agricultural land Woodland and forest 2.1 8.9 15.4 6.1 2.1 11.8 19.6 6.0 2.1 8.7 15.2 6.2

100.0 100.0

Total land holdings

100.0

100.0

100.0

100.0 100.0 100.0

100.0

100.0 100.0 100.0

TABLE 5.7: AREA OF LAND HOLDINGS BY TYPE OF LAND – ECOLOGICAL BELTS AND DEVELOPMENT REGIONS BY SEX OF HOLDER, NEPAL, 2001/02

(Area in thousand hectares)

|                  |             |             |         |             | (2.11.6     | ou iii tiio | abana ne | cui cs)     |             |             |        |             |
|------------------|-------------|-------------|---------|-------------|-------------|-------------|----------|-------------|-------------|-------------|--------|-------------|
|                  |             | Area        |         | % of        |             | Area        |          | % of        |             | Area        |        | % of        |
| Geographic Area  | Wet<br>land | Dry<br>land | Total   | wet<br>land | Wet<br>land | Dry<br>land | Total    | wet<br>land | Wet<br>land | Dry<br>land | Total  | wet<br>land |
|                  |             | All hold    | ings    |             |             | Female      | holders  |             | N           | Iale hold   | ers    |             |
| Ecological Belt  |             |             |         |             |             |             |          |             |             |             |        |             |
| Mountain         | 71.8        | 146.9       | 218.7   | 32.8        | 4.0         | 8.2         | 12.3     | 32.7        | 67.8        | 138.7       | 206.4  | 32.8        |
| Hill             | 327.5       | 711.1       | 1,038.6 | 31.5        | 25.1        | 57.9        | 83.0     | 30.2        | 302.4       | 653.3       | 955.7  | 31.6        |
| Tarai            | 1,206.9     | 189.7       | 1,396.6 | 86.4        | 39.8        | 8.8         | 48.6     | 81.9        | 1167.2      | 181.0       | 1348.2 | 86.6        |
| Development Regi | on          |             |         |             |             |             |          |             |             |             |        |             |
| Eastern          | 518.4       | 277.1       | 795.5   | 65.2        | 21.2        | 17.5        | 38.7     | 54.7        | 497.2       | 259.6       | 756.8  | 65.7        |
| Central          | 503.4       | 246.8       | 750.2   | 67.1        | 17.7        | 14.0        | 31.8     | 55.8        | 485.7       | 232.7       | 718.4  | 67.6        |
| Western          | 284.7       | 227.4       | 512.1   | 55.6        | 19.6        | 28.4        | 48.0     | 40.9        | 265.1       | 199.0       | 464.1  | 57.1        |
| Mid Western      | 166.5       | 204.2       | 370.7   | 44.9        | 6.4         | 10.8        | 17.2     | 37.0        | 160.2       | 193.3       | 353.5  | 45.3        |
| Far Western      | 133.2       | 92.3        | 225.4   | 59.1        | 3.9         | 4.1         | 8.0      | 48.6        | 129.3       | 88.1        | 217.4  | 59.5        |
| NEPAL            | 1,606.2     | 1,047.7     | 2,653.9 | 60.5        | 68.8        | 74.9        | 143.8    | 47.9        | 1537.4      | 972.9       | 2510.3 | 61.2        |

TABLE 5.8: NUMBER AND AREA OF LAND HOLDINGS BY TYPE OF LAND AND SIZE OF THE HOLDING AND BY SEX OF HOLDER, NEPAL 2001/02

(In thousand except percent)

| -                |                | (III tilot | isand except pe  | icent)  |          |  |  |  |  |  |
|------------------|----------------|------------|------------------|---------|----------|--|--|--|--|--|
|                  |                |            | Type of land     |         |          |  |  |  |  |  |
| Size of holding  | Total number   | La         | and area in hect | ares    | % of Wet |  |  |  |  |  |
|                  | of holdings    | Wet Land   | Dry Land         | Total   | land     |  |  |  |  |  |
|                  |                |            |                  |         |          |  |  |  |  |  |
|                  |                |            | All holdings     |         |          |  |  |  |  |  |
| Less than 0.5 ha | 1,578.9        | 189.3      | 200.9            | 390.2   | 48.5     |  |  |  |  |  |
| 0.5 - 2.0 ha     | 1,504.3        | 814.2      | 619.4            | 1,433.6 | 56.8     |  |  |  |  |  |
| 2.0 ha and over  | 254.2          | 602.7      | 227.4            | 830.1   | 72.6     |  |  |  |  |  |
| Total            | 3,337.4        | 1,606.2    | 1,047.7          | 2,653.9 | 60.5     |  |  |  |  |  |
|                  | Female holders |            |                  |         |          |  |  |  |  |  |
| Less than 0.5 ha | 168.3          | 16.2       | 22.1             | 38.3    | 42.3     |  |  |  |  |  |
| 0.5 - 2.0 ha     | 92.9           | 38.2       | 43.5             | 81.7    | 46.8     |  |  |  |  |  |
| 2.0 ha and over  | 7.8            | 14.4       | 9.3              | 23.7    | 60.8     |  |  |  |  |  |
| Total            | 269.0          | 68.8       | 74.9             | 143.8   | 47.9     |  |  |  |  |  |
|                  |                |            | Male holders     |         |          |  |  |  |  |  |
| Less than 0.5 ha | 1,410.6        | 173.1      | 178.8            | 351.8   | 49.2     |  |  |  |  |  |
| 0.5 - 2.0 ha     | 1,411.5        | 776.0      | 575.9            | 1,351.9 | 57.4     |  |  |  |  |  |
| 2.0 ha and over  | 246.4          | 588.3      | 218.1            | 806.4   | 72.9     |  |  |  |  |  |
| Total            | 3,068.4        | 1,537.4    | 972.8            | 2,510.2 | 61.2     |  |  |  |  |  |

**Back**