

Land Utilization and Crop Statistics in Bangladesh

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Land utilization

Land utilization or land-use denotes how human use the biophysical or ecological properties of land. Land-uses include the modification and/or management of land for agriculture, settlement, industry, river/pond, forest and other uses. In other-word, what amount of land is being utilized for what purpose. Agricultural land-use is the arrangements, activities and inputs are taken in a land to produce crops.

Both physical and human factors influence how land is used. Climate, terrain, and soil type are all physical influences. Population, technology, skill, population density, tradition, competence, and other human characteristics are all important considerations.

Land levels in relation to flooding

The information has been provided in terms of depth of flooding phases. The terms used have the following meanings:

- **Highland (H):** Land which is above normal flood-level.
- **Medium Highland (MH):** Land which is normally flooded about 90 cm deep during the flood season.
- **Medium Lowland (ML):** Land which is normally flooded between 90 cm. and 180 cm. deep during the flood season.
- **Lowland (L):** Land which is normally flooded between 180 and 300 cm deep during the flood season.
- **Very Lowland (VL):** Land which is normally flooded deeper than 300 cm during the flood season.

Land use statistics of Bangladesh

According to a Bangladesh Bureau of Statistics survey for the fiscal year 2022-2023, the country has at least 481,000 hectares of fallow lands, which can be cultivated for agriculture. Of the total uncultivated lands, over 6,68,086 hectares of lands are associated with homesteads, a 2023 government survey reveals. Overall, within the 50 years of Bangladesh's independence, cropping intensity has increased from 143% (1971-72) to 198% (2022-2023) with an increasing rate of 1.10% per year and will be 211.03 % (projected) by 2030.



Table 1: Land Utilization of Bangladesh ('000 hectares)

Parameters	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023
Total land			14846	14846*	14756	14755
Total cultivable area	7772	7967	8000	8110*	8829*	8800
Forest area	2578	2576	2576	2575	2575	2575
Non-cultivable	3579	3386	3554	3363	3354	3382
Cultivable waste	233	259	272	283	296	294
Current fallow	367	456	431	452	488	481
Single cropped area	2231	2133	2110	2088	2057	2043
Double cropped area	3966	4073	4125	4114	4107	4103
Tripple cropped area	1788	1859	1867	1859	1858	1858
Quadruple cropped area	17	17	23	21	20	19
Net cropped area	8002	8083	8126	8082	8043	8025
Total/Gross cropped area	15595	15927	16057	15982	15927	15903
Intensity of cropping (%)	195	197	198	197	198	198

Source: Ministry of Agriculture (2022), BBS (2023); *www.macrotrends.net

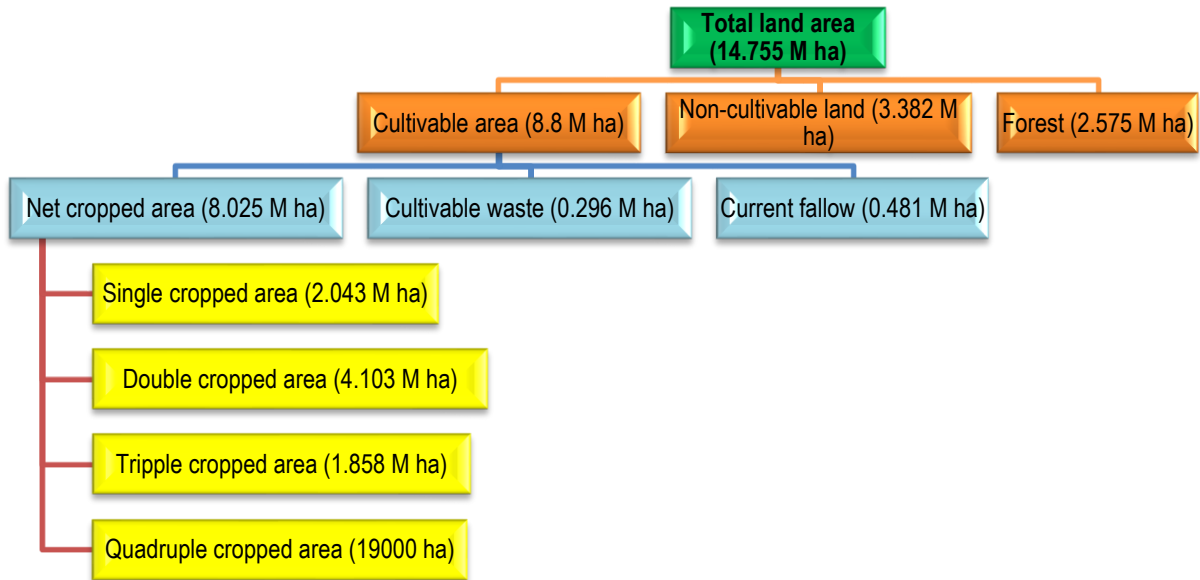


Figure 2: Land utilization in Bangladesh under different categories, 2022-2023



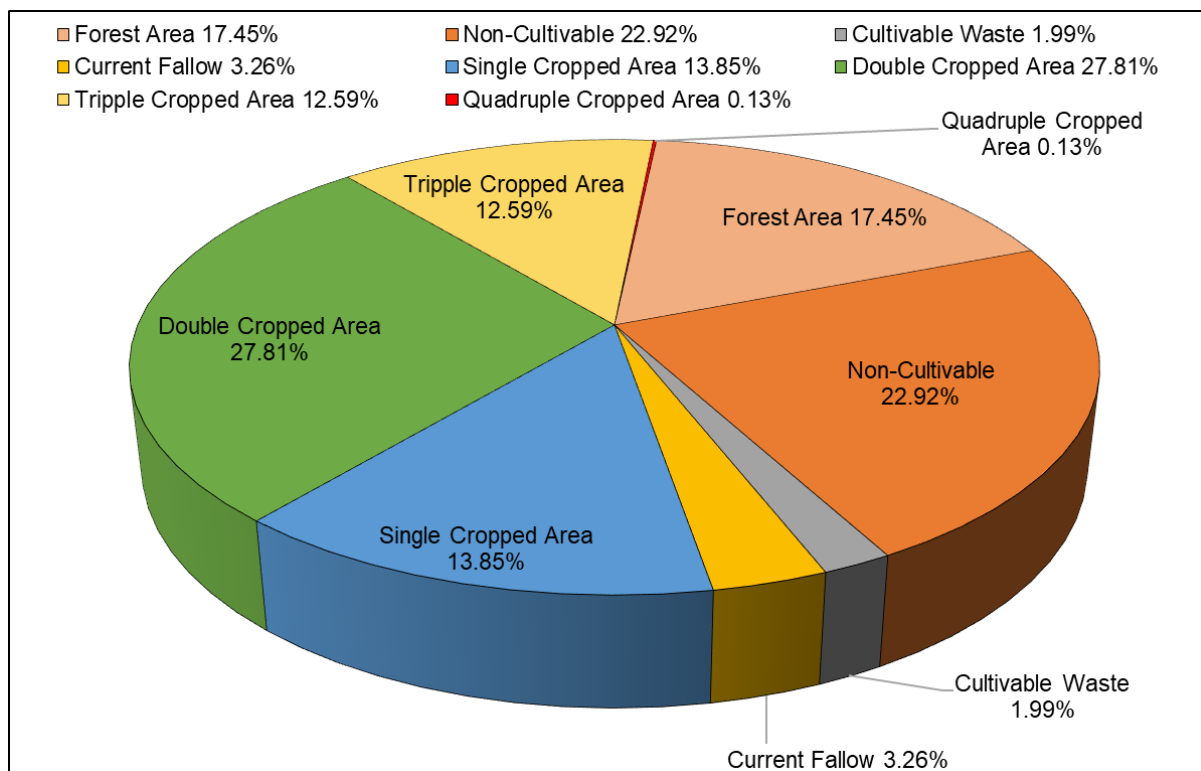


Figure 1. Land utilization (%) of Bangladesh [Source: BBS (2023)]

Cultivable area: The area (8.8 M ha, 59.64%) which is suitable for cultivation.

Non-cultivable area: The area (3.382 M ha, 22.92%) which is suitable or not suitable for cultivation and it is not generally brought under cultivation. This area includes roads, cities, towns, bazaars, schools, colleges, hills, railways, airports, rivers, bills, haors, etc.

Forest area: The land area (2.575 M ha, 17.45%) which is covered by natural forest as well as manmade. The forest area should be 25% of the total area of any country.

Net cropped area: The area (8.025 M ha, 54.39%) which is actually brought under cultivation in a year is called net cropped area.

Cultivable waste (0.296 M ha, 1.99%): The land suitable for cultivation but is not brought under cultivation for more than 5 years in succession. This area includes playgrounds, surrounding buildings, roadsides, ails, premises of schools, colleges, and offices, etc.

Current fallow (0.481 M ha, 3.26%): The cultivable area which is not been brought under cultivation in a year is called current fallow. This occurs for various reasons such as; to enrich the soil fertility, farmers' inability to cultivate the land for want of money or inputs or powers, unfavorable soil conditions, etc. The area is.

Single cropped area: The area (2.043 M ha) is covered by one crop in a year, e.g., Sugarcane, deep water aman, etc. It is 30.2% of the net cropped area.

Doubled cropped area: The area (4.103 M ha) is covered by two crops in a year, e.g., T. aman - Wheat and so on. It is 51.12% of the net cropped area.

Triple cropped area: The area (1.858 M ha) is covered by three crops in a year, e.g., T. aman – T. boro – T. aus and so on. It is 23.15% of the net cropped area.



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Quadruple cropped area: The area (**19000 ha**) is covered by four crops in a year, e.g. T. aman – mustard – mungbean – Jute and so on. It is 0.23% of the net cropped area.

Total cropped area: The area (**15.899 M ha**) is calculated as (Single cropped area ×1) + (Double cropped area ×2) + (Tripple cropped area ×3)+(Quadruple cropped area ×4).

Cropping Intensity (CI): It is the ratio of net cropped area (NCA) to the total cropped area (TCA).

$$\begin{aligned} \text{CI (\%)} &= \frac{\text{TCA}}{\text{NCA}} \times 100\% \\ &= \frac{15.899}{8.025} \times 100\% = 198\% \end{aligned}$$



Crop Statistics of Bangladesh

Table 2: Cultivation and production of cereal crops, 2022-2023

Food crop	Cultivation (M ha)	Production (M ton)
Aus	1.061	2.901
Aman	5.723	15.426
Boro	4.851	20.767
Total (Rice)	11.636	39.095
Wheat	0.316	1.170
Maize	0.496	4.592
Total cereal (Rice + Wheat + Maize)	12.448	44.857

Source: BBS (2023)

Table 3: Cultivation and production of other crops, 2022-23

Food crop	Cultivation (M ha)	Production (M ton)
Potato	0.483	10.431
Vegetables	0.463	5.365
Oilseed crop	0.551	1.171
Pulse crop	0.315	0.439
Onion	0.203	2.546

Source: BBS (2023)

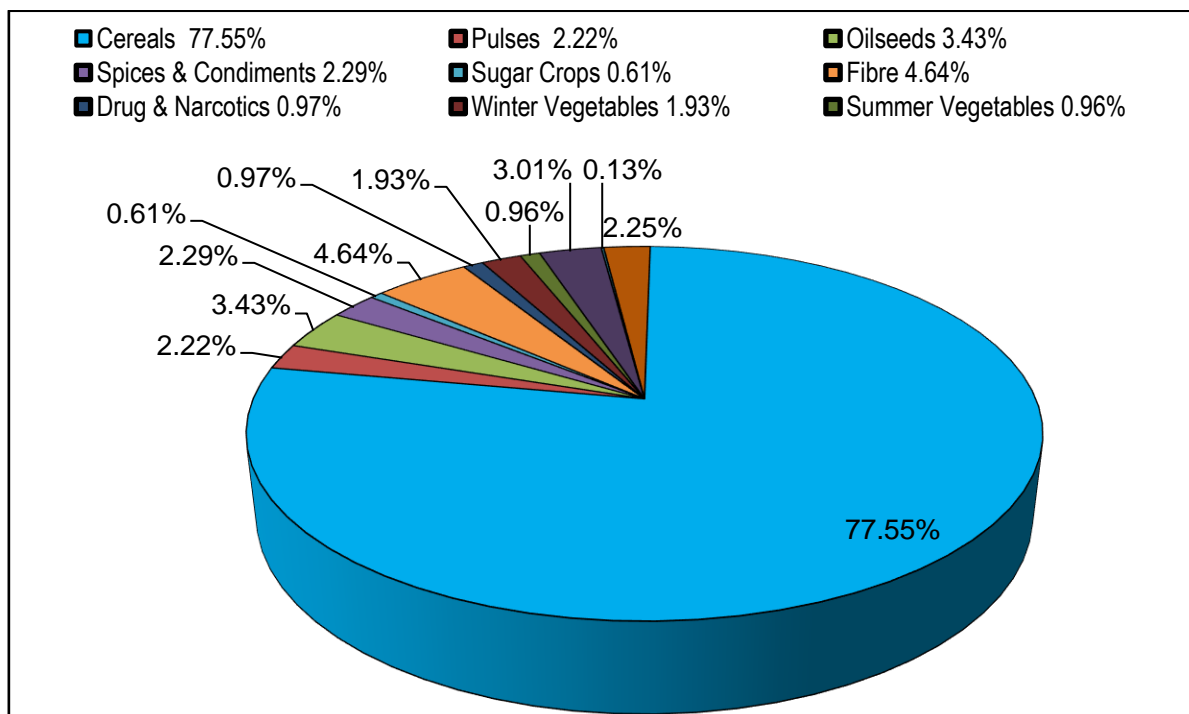


Figure 3: Area under cultivation of different crops in Bangladesh, 2022-2023

Source: BBS (2023)



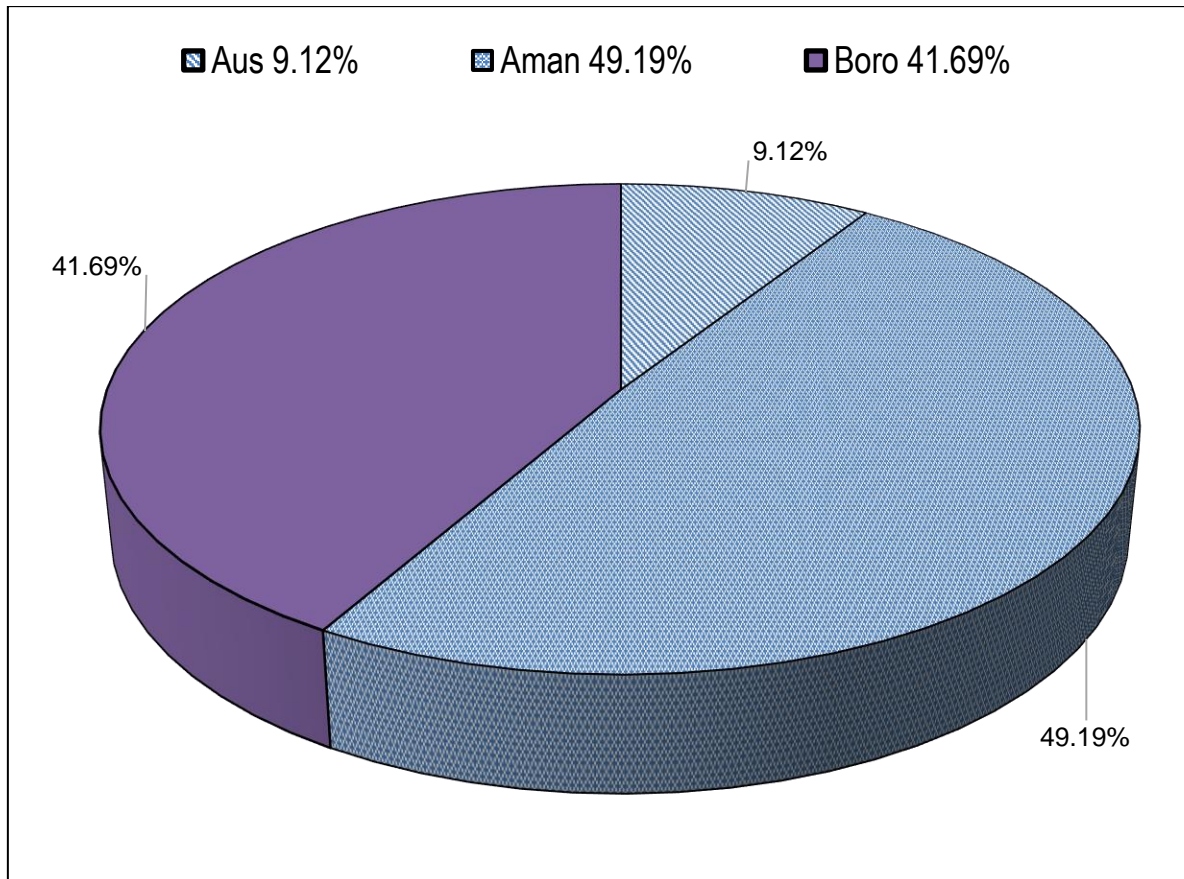


Figure 4: Area under cultivation of rice in Bangladesh, 2022-2023
Source: BBS (2023)

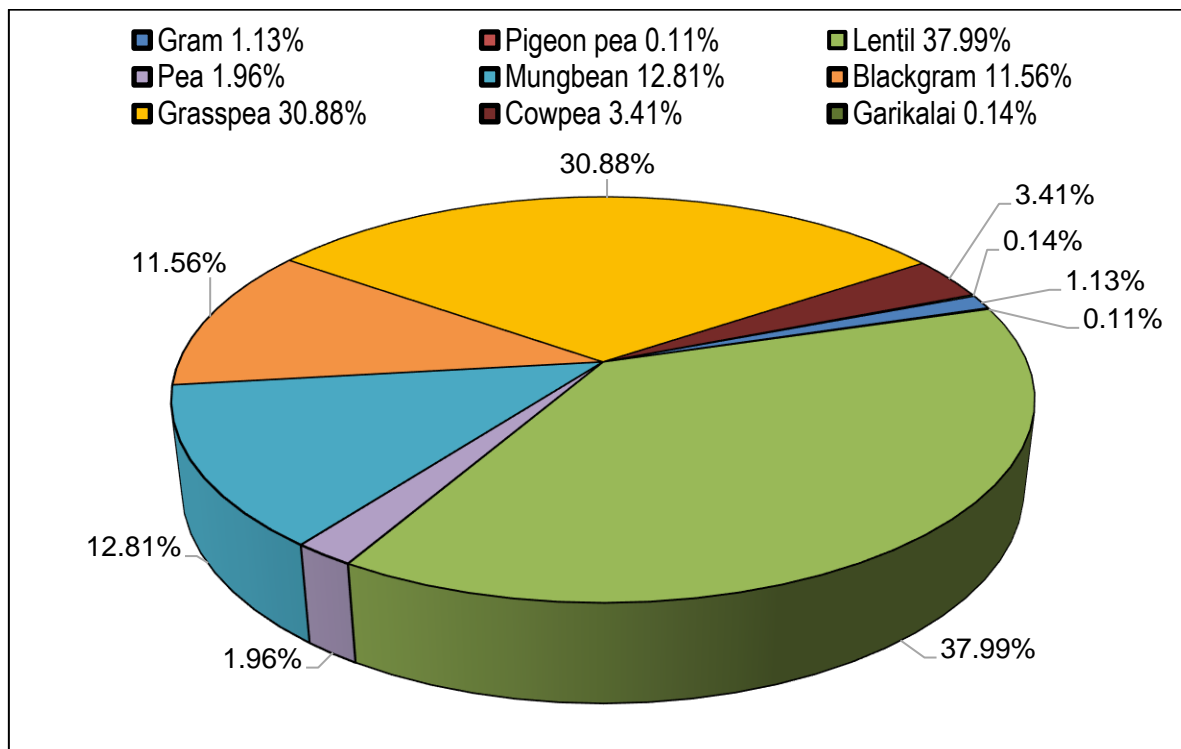


Figure 5: Area under cultivation of pulses in Bangladesh, 2022-2023
Source: BBS (2023)



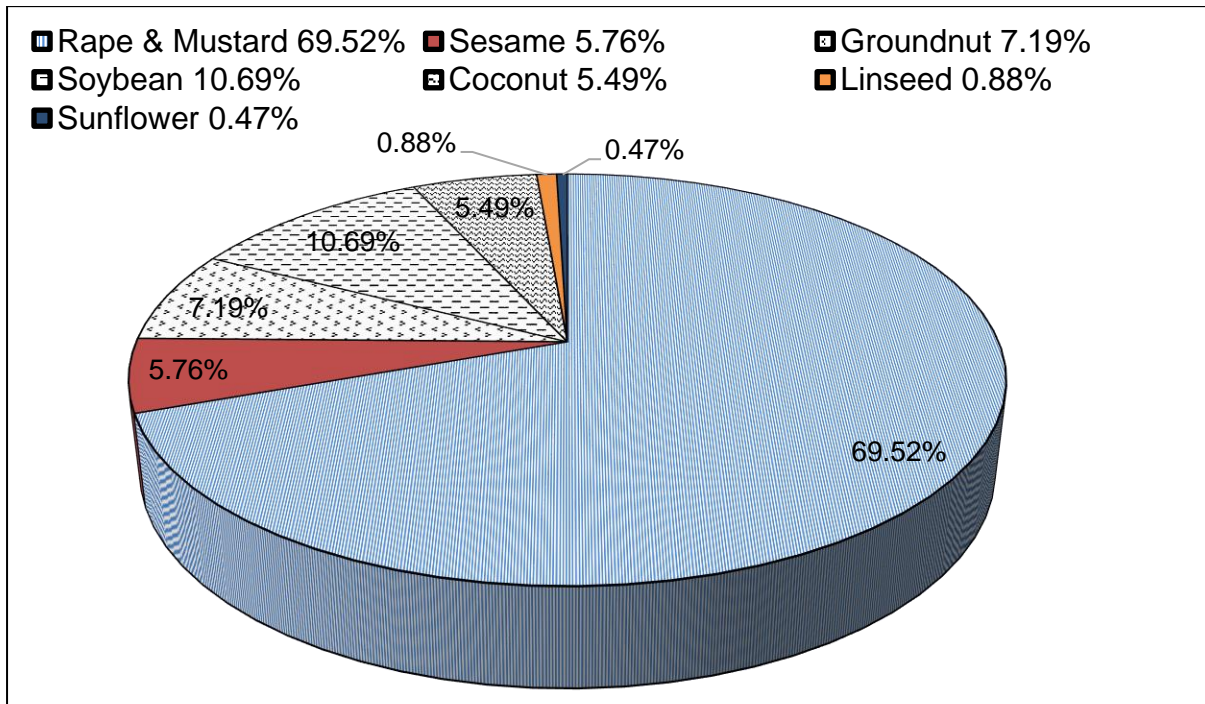


Figure 6: Area under cultivation of oilseeds in Bangladesh, 2022-2023
Source: BBS (2023)

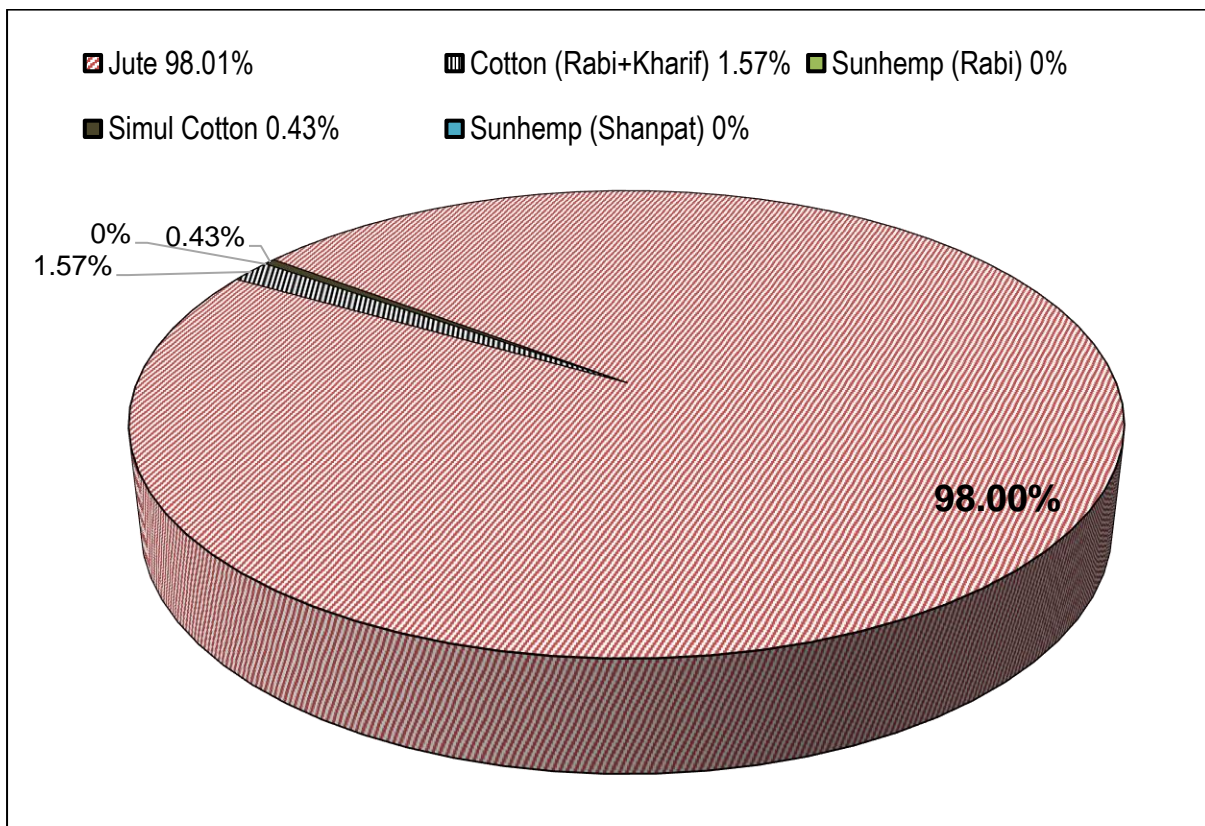


Figure 7: Area under cultivation of fibre crops in Bangladesh, 2022-2023
Source: BBS (2023)



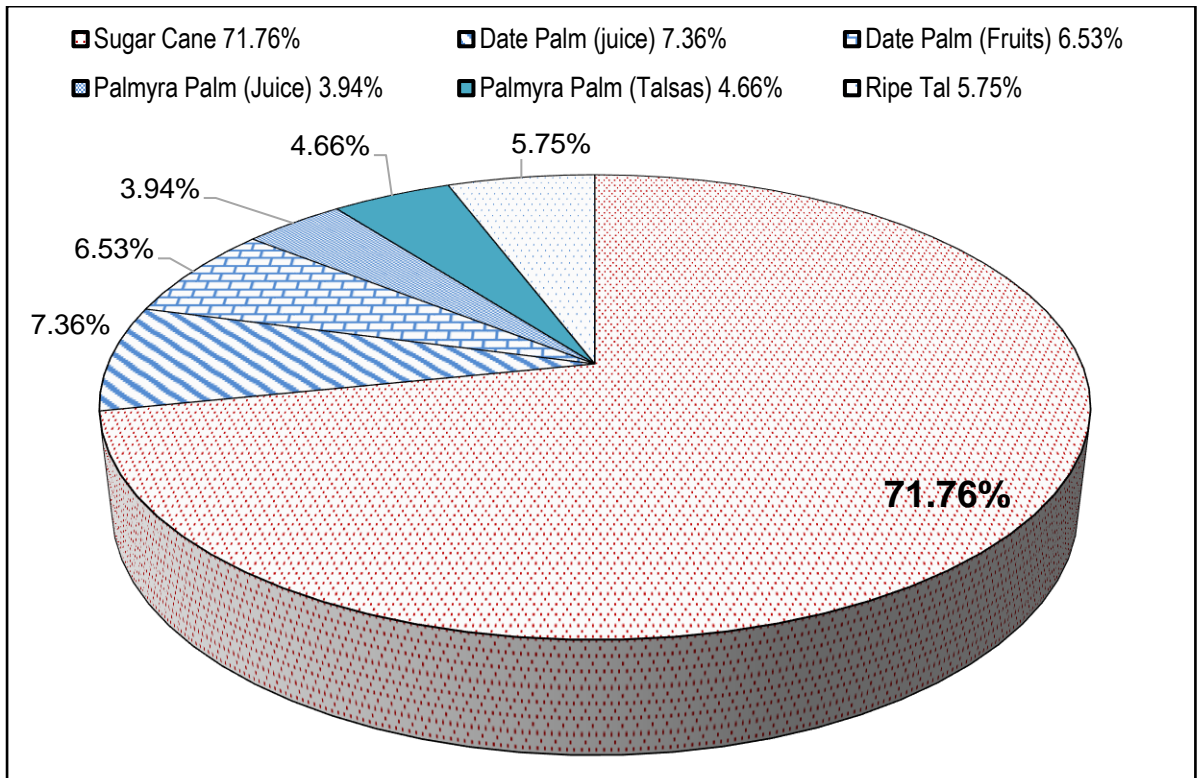


Figure 8: Area under cultivation of sugar crops in Bangladesh, 2022-2023
Source: BBS (2023)

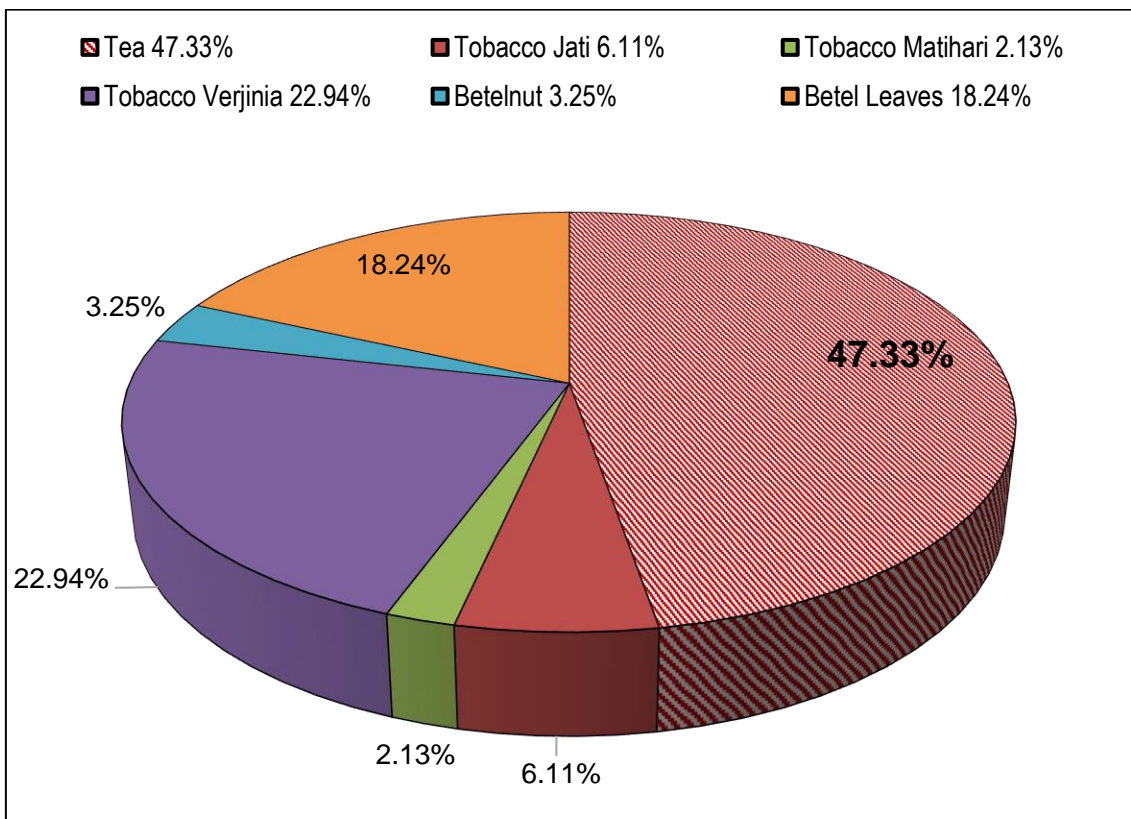


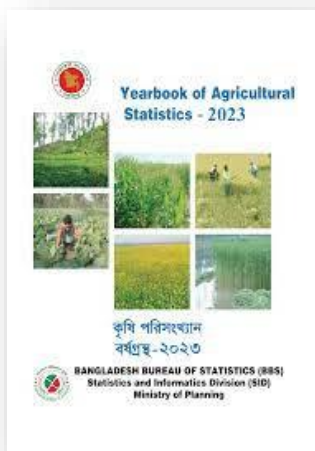
Figure 9: Area under cultivation of beverage and narcotics in Bangladesh, 2022-2023
Source: BBS (2023)



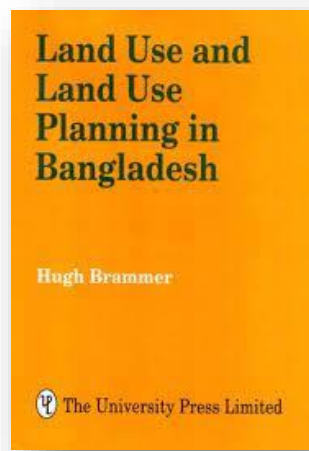
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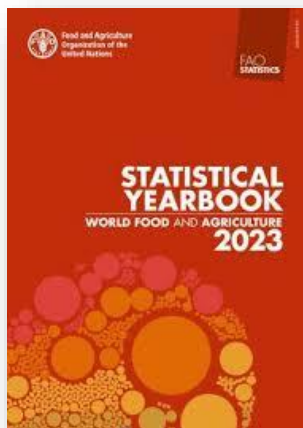
Suggested reading:



Yearbook of Agricultural Statistics 2023
By Bangladesh Bureau of Statistics
Ministry of Planning (2023)



Land Use and Land Use Planning in Bangladesh
By Hugh Brammer
The University Press Limited (2002)



FAO Statistical Yearbook 2023
FAO, Rome (2023)

