# Rasun Shimulbari Village at a Glance: Kurigram, Bangladesh

#### Salient features of the VDSA Project sample village

#### Village Dynamics in South Asia (VDSA) Project

VDSA Project has been collecting panel data on farm households in South Asia. Based on these panel data, it provides profound insights into the social and economic changes in the village and household economies in the South Asia. The project collecting long-term socioeconomic data to better link and strengthens research, policy, and capacity building activities.

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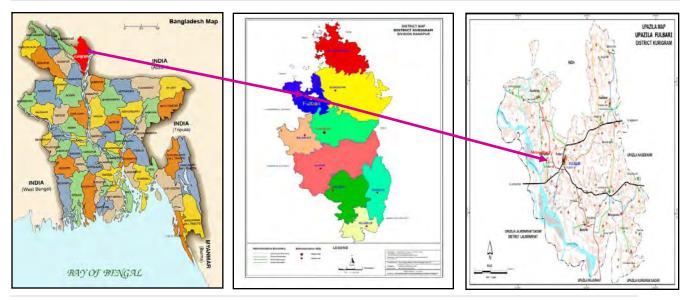
PARTNERS:



## Basic information about the village

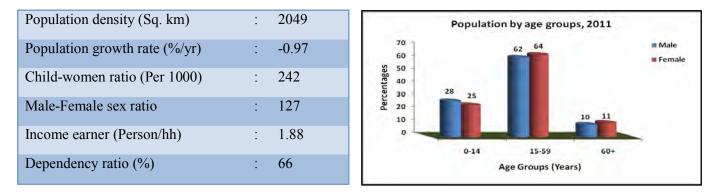
## A) LOCATION AND BASIC CHARACTERISTICS

| Name of the village                     | :   | Rasun Shimulbari                |
|---|-----|---------------------------------|
| Name of the union                       | :   | Shimulbari                      |
| Name of the Upazila                     | :   | Fulbari                         |
| Name of the district                    | :   | Kurigram                        |
| Agro-ecological zone (AEZ)              | :   | Active Tista Floodplain (AEZ 2) |
| Agro-ecology                            | :   | Unfavorable-flood prone         |
| Development infrastructures             | :   | Unfavorable                     |
| Distance from Upazila HQ                | km  | 2                               |
| Distance from district HQ               | km  | 16                              |
| Latitude (N)                            | :   | 25°92′                          |
| Longitude (E)                           | :   | 89°57′                          |
| Total land area (whole village)         | ha  | 40.37                           |
| Total land area (sample households)     | ha  | 15.17                           |
| Total households (whole village)        | no. | 189                             |
| Total households (sample households)    | no. | 40                              |
| Total population (whole village)        | no. | 827 (Male: 415; Female: 412)    |
| Total population (sample households)    | no. | 204 (Male: 114; Female: 90)     |
| Households involved in crop production  | %   | 62                              |
| Distance from nearest district town     | km  | 11                              |
| Distance from nearest national highways | km  | 11                              |
| Head of the village                     | :   | Union Parishad Member           |



## **B) DEMOGRAPHY OF THE SAMPLE HOUSEHOLDS (as of 2011)**

### **Classification of Population**



#### **Classification of Households**

Household and population, by types of religion

| Male headed households (no.)   | : | 36 | Types of religion | Household      | Population     |
|--------------------------------|---|----|-------------------|----------------|----------------|
| Female headed households (no.) | : | 4  |                   | ( <b>no.</b> ) | ( <b>no.</b> ) |
|                                |   | 10 | Islam             | 26             | 140            |
| Total households (no.)         | : | 40 | Hindu             | 14             | 64             |

Distribution of households and their family size, by farm size category

| Farm household category* | Number of<br>household | Percentage share in<br>all farms | Family size<br>(Person/Household) |
|--------------------------|------------------------|----------------------------------|-----------------------------------|
| Landless                 | 23                     | 57.50                            | 4.87                              |
| Small                    | 15                     | 37.50                            | 5.13                              |
| Medium                   | 2                      | 5.00                             | 9.50                              |
| Large                    | 0                      | 0                                | 0                                 |
| All farms                | 40                     | 100                              | 5.20                              |

\*Landless (<=0.2 ha), Small (0.21-1.00 ha), Medium (1.01-2.00 ha) & Large (>2.00 ha)

### **Educational Level**

Number of literate persons and literacy rate of the population

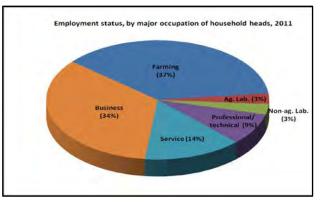
| Levels of education <sup>*</sup> | Male (no.) | Female (no.) | Both sex (no.) |
|----------------------------------|------------|--------------|----------------|
| Illiterate                       | 18         | 21           | 39             |
| Can sign only                    | 2          | 0            | 2              |
| Primary                          | 25         | 15           | 40             |
| Secondary                        | 41         | 39           | 80             |
| Higher secondary                 | 11         | 7            | 18             |
| Technical/vocational             | 1          | 0            | 1              |
| Graduate & above                 | 5          | 2            | 7              |
| Total literate persons           | 85         | 63           | 148            |
| Literacy rate (%)                | 79.05      | 74.12        | 76.84          |

\* Literacy rate was calculated for people aged 5 years and above.

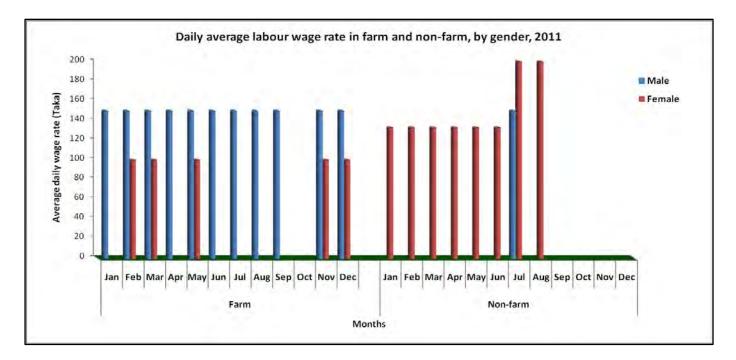
## Occupation

Employment status, by major occupation

| Types of occupation                 | <b>Population (no.)</b> |
|-------------------------------------|-------------------------|
|                                     |                         |
| Farming                             | 19                      |
| Agricultural labor                  | 1                       |
| Non-agricultural labor              | 5                       |
| Professional or technical worker    | 5                       |
| Service worker                      | 25                      |
| Business                            | 20                      |
| Total economically active persons   | 75                      |
| Total economically inactive persons | 129                     |



## Wage rates of farm and non-farm labor, by gender

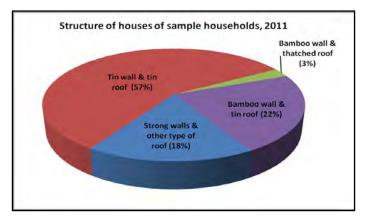


#### Migrated population in the sample households

| Migration           | Both sex (no.) | Male (no.) | Female (no.) |
|---------------------|----------------|------------|--------------|
| Within the district | 1              | 1          | 0            |
| Another district    | 11             | 10         | 1            |
| Foreign country     | 0              | 0          | 0            |
| Total out-migration | 12             | 11         | 1            |
| Total in-migration  | 27             | 14         | 13           |

## C) OWNERSHIP OF ASSETS OF THE SAMPLE HOUSEHOLDS (as of 2011)

Structure of houses of the sample households



Possession of livestock and poultry

| Types of<br>livestock | Total<br>numbers | Average<br>(no./hh) |
|-----------------------|------------------|---------------------|
| Bullocks              | 3                | 0.08                |
| Buffaloes             | 1                | 0.03                |
| Cow                   | 36               | 0.90                |
| Young<br>cattle/calf  | 22               | 0.55                |
| Goat                  | 11               | 0.28                |
| Sheep                 | 4                | 0.10                |
| Poultry               | 237              | 5.93                |

Possession of agricultural/farm assets of the sample households

| Farm machinery                       | <b>Total numbers</b> | Average (no./hh) |
|--------------------------------------|----------------------|------------------|
| Local plough (iron/wooden)           | 5                    | 0.13             |
| Blade harrow                         | 1                    | 0.03             |
| Sprayers                             | 13                   | 0.33             |
| Weeding implements                   | 50                   | 1.25             |
| Shallow tube well (STW)              | 5                    | 0.13             |
| Thresher                             | 1                    | 0.03             |
| Trucks                               | 1                    | 0.03             |
| Agro processing unit                 | 79                   | 1.98             |
| Implements used for caste occupation | 36                   | 0.90             |
| Other minor implements               | 136                  | 3.40             |

Possession of consumer assets of the sample households

| Types            | Total numbers | Average (no./hh) |
|------------------|---------------|------------------|
| Television       | 14            | 0.35             |
| Radio            | 1             | 0.03             |
| Mobile phone     | 64            | 1.60             |
| Tape recorder    | 4             | 0.10             |
| Watches          | 46            | 1.15             |
| Sewing machine   | 3             | 0.08             |
| Fan              | 22            | 0.55             |
| Motor cycle      | 6             | 0.15             |
| Refrigerator     | 1             | 0.03             |
| Bicycle/rickshaw | 41            | 1.03             |
| Others           | 5             | 0.13             |

| Particulars                             | Male  | Female   | Jointly |
|---|-------|----------|---------|
| 1) Asset ownership                      | Witte | I cinare | Jointry |
| Land                                    | 80    | 3        | 10      |
| Livestock                               | 8     | 3        | 80      |
| Credit                                  | 3     | 33       | 60      |
| Machinery                               | 5     | 0        | 90      |
| Investment                              | 8     | 3        | 88      |
| 2) Decision making for input use        |       |          |         |
| Seeds                                   | 68    | 3        | 10      |
| Fertilizers                             | 68    | 3        | 10      |
| Pesticides                              | 68    | 3        | 10      |
| Family labor                            | 13    | 3        | 65      |
| Hired labor                             | 18    | 3        | 60      |
| 3) Decision making for output sell      |       |          |         |
| Crop main production                    | 10    | 3        | 68      |
| Sale quantity                           | 8     | 5        | 68      |
| Fodder production & use                 | 8     | 0        | 73      |
| 4) Decision making for other activities |       |          |         |
| Children marriage                       | 0     | 3        | 63      |
| Education of children                   | 3     | 5        | 80      |
| Coping mechanisms for disaster          | 0     | 0        | 5       |
| Household maintenance                   | 3     | 13       | 84      |
| Migration                               | 0     | 0        | 10      |
| Pleasure trip                           | 3     | 3        | 93      |
| Whom to give vote                       | 5     | 3        | 92      |

Percentage of sample households of resource ownership and decision making, by gender

\*Sample households which belong to landless group and did not grow any crops were excluded.

### D) LAND RESOURCES OF THE SAMPLE HOUSEHOLDS (as on 2011)

Area coverage per household, by types of land

Area coverage per household, by types of soil

| Land types    | Area (ha) | % of total area | Soil types | Area (ha) | % of total area |
|---------------|-----------|-----------------|------------|-----------|-----------------|
| High land     | 0.0132    | 3.77            | Sandy soil | 0.0063    | 1.80            |
| Medium land   | 0.2521    | 72.23           | Loamy      | 0.0590    | 16.90           |
| Low land      | 0.0812    | 23.25           | Sandy loam | 0.2738    | 78.43           |
| Very low land | 0.0026    | 0.75            | Clay loam  | 0.0100    | 2.87            |

## E) LAND USE PATTERN OF THE SAMPLE HOUSEHOLDS (As on 2011)

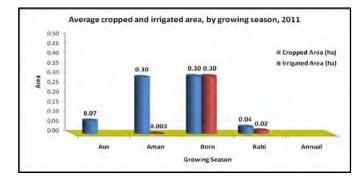
Total land status by land ownership

| Per capita total land (ha)        | : | 0.0488 | Ownership                | Total land<br>area (ha/hh) | Total irrigated<br>area (ha/hh) |
|-----------------------------------|---|--------|--------------------------|----------------------------|---------------------------------|
| Per capita agricultural land (ha) | : | 0.0308 | Own land                 | 0.2468                     | 0.2454                          |
| Per capita homestead area (ha)    | : | 0.0059 | Leased-in on crop share  | 0.0229                     | 0.0229                          |
| Per capita homestead garden and   | : | 0.0121 | Leased-out on crop share | 0.0288                     | 0.0288                          |
| bush (ha)                         |   |        | Mortgaged-in             | 0.0795                     | 0.0795                          |
|                                   |   |        | Mortgaged-out            | 0.0085                     | 0.0085                          |
|                                   |   |        | Operated area            | 0.3117                     | 0.3104                          |

| Enterprises       | Aus    | Aman   | Boro   | Rabi   | Annual |
|-------------------|--------|--------|--------|--------|--------|
| Cropped area      | 0.0705 | 0.2950 | 0.2994 | 0.0380 | -      |
| Pond/fish culture | -      | -      | -      | -      | -      |
| Agro-forestry     | -      | -      | -      | -      | -      |
| Fallow land       | 0.2678 | 0.0218 | 0.0405 | 0.2746 | -      |

Average area per household of major land patterns, by growing season (area in hectare)

\*Total operated area may differ from season to season due to changes in land ownership patterns

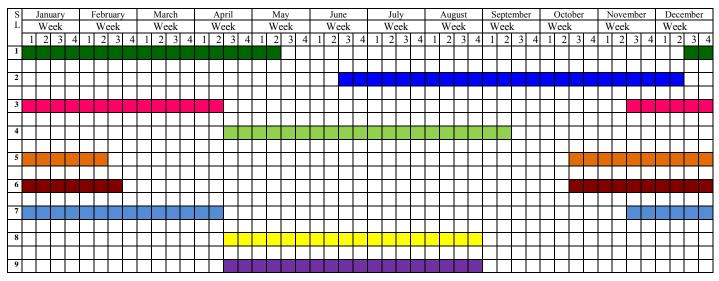


#### Area coverage, by sources of irrigation

| Irrigation source | Area<br>(ha/hh) | % of total<br>area |
|-------------------|-----------------|--------------------|
| STW               | 0.3030          | 97.62              |
| DTW               | 0.0066          | 2.12               |
| LLP               | 0.0008          | 0.26               |

## F) Crop Production (As on 2011)

Seasonality of cropping calendar



#### Legend:

| 1 | Boro (Rice)    | 4 | Jute    | 7 | Tobacco |
|---|----------------|---|---------|---|---------|
| 2 | T. Aman (Rice) | 5 | Mustard | 8 | Arum    |
| 3 | Wheat          | 6 | Potato  | 9 | Dhancha |

Crops area and yield, by growing season (area in hectare)

| Enterprises              | Aus            | Aman          | Boro          | Rabi           | Annual |
|--------------------------|----------------|---------------|---------------|----------------|--------|
| 1) Cereal Crops:         |                |               |               |                |        |
| Paddy                    | -              | 0.2950 (2.88) | 0.2994 (5.01) | -              | -      |
| Wheat                    | -              | -             | -             | 0.0129 (2.62)  | -      |
| 2) Cash Crops:           |                |               |               |                |        |
| Jute                     | 0.0684 (1.67)  | -             | -             | -              | -      |
| 3) Oilseed Crops:        |                |               |               |                |        |
| Mustard                  | -              | -             | -             | 0.0139 (0.45)  | -      |
| 4) Tuber Crops:          |                |               |               |                |        |
| Potato                   | -              | -             | -             | 0.0046 (10.20) | -      |
| 5) Vegetables:           |                |               |               |                |        |
| Arum                     | 0.0013 (11.54) | -             | -             | -              | -      |
| 6) Tobacco               | -              | -             | -             | 0.0067 (2.10)  | -      |
| 7) Dhancha <sup>**</sup> | 0.0008 (10000) | -             | -             | -              | -      |
| Gross Cropped Area       | 0.0705         | 0.2950        | 0.2994        | 0.0380         | -      |

\*Figure in the parenthesis indicates yield in metric tonne per hectare and \*\* means Taka per hectare.

Seasonal cropped area, by types of variety of the sample households (area in hectare)

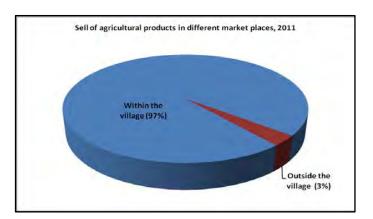
| Variety types | Rice |        |        | Non-rice |           |        |        |
|---------------|------|--------|--------|----------|-----------|--------|--------|
|               | Aus  | Aman   | Boro   | Kharif-I | Kharif-II | Rabi   | Annual |
| Local         | 0    | 0.0362 | 0      | 0.0021   | 0         | 0.0139 | 0      |
| Modern        | 0    | 0.2588 | 0.1960 | 0.0684   | 0         | 0.0129 | 0      |
| Hybrid        | 0    | 0      | 0.1034 | 0        | 0         | 0.0112 | 0      |
| Total area    | 0    | 0.2950 | 0.2994 | 0.0705   | 0         | 0.0380 | 0      |

Production, consumption and sale of all agricultural commodities

| Particulars                         | Amount |
|-------------------------------------|--------|
| Crop production (metric tonne/hh)   | 2.59   |
| Sell (metric tonne/hh)              | 1.05   |
| Sell of total production (%)        | 41     |
| Consumption of total production (%) | 59     |

Sell of agricultural products, by different market intermediaries

| Market intermediaries | Percentages |
|-----------------------|-------------|
| Large trader/shop     | 0           |
| Middleman/broker      | 100         |
| Money lender          | 0           |
| Input supplier        | 0           |
| Neighbor              | 0           |



## G) BORROWING AND SAVINGS BY SAMPLE HOUSEHOLDS (as on 2011)

Name of organization Male Female **Both sex** Grameen bank 0 4 4 ASA 1 11 12 BRAC 0 1 1 Other NGOs/local NGOs 0 11 11

Membership of household members in different organizations (unit in numbers)

Institutional and non-institutional sources of borrowing and saving

| Sources             | Numbers <sup>*</sup> | Amount (Tk/hh) | Annual interest rate (%) |
|---------------------|----------------------|----------------|--------------------------|
| A) Borrowing        |                      |                |                          |
| NGOs                | 30 (75.00)           | 17360          | 15.00                    |
| Public bank         | 1 (2.50)             | 625            | 8.00                     |
| Friends & relatives | 5 (12.50)            | 9625           | 0                        |
| B) Saving           |                      |                |                          |
| Bank                | 24 (60.00)           | 2629           | -                        |
| NGOs                | 27 (67.50)           | 1158           | -                        |

\*Figure in the parenthesis indicates percentage of total.

### H) INFRASTRUCTURE AND ACCESSIBILITY

| Nearest market place (Name & distance)                   | : | Fulbari; 2.0 km                      |
|--|---|--------------------------------------|
| Distance from the village market to Upazila market (km)  | : | 2.5                                  |
| Distance from the village market to district market (km) | : | 11                                   |
| Mode of transportation                                   | : | Rickshaw, Auto, Bicycle, Motor cycle |
| Number of primary schools                                | : | 1                                    |
| Number of high schools                                   | : | Nil                                  |
| Number of colleges                                       | : | Nil                                  |
| Total number of shops in the village                     | : | 47                                   |
| Number of rice husking mills in the village              | : | 2                                    |
| Number of public health clinic/centre                    | : | 1                                    |
| Number of private health clinic/centre                   | : | Nil                                  |
| Number of religious institute in the village             | : | (4) Mosque, (3) Temple, (0) Church   |
| Number of hand tube-well for drinking water              | : | 198                                  |

Others business units in the village (unit in numbers)

| Grocery Shop  | : | 14 | PDS Shop          | : | 0 | Hotel/Canteen     | : | 6 |
|---------------|---|----|-------------------|---|---|-------------------|---|---|
| Meat Shop     | : | 0  | Carpenter         | : | 6 | Blacksmith        | : | 0 |
| Medical Shop  | : | 6  | Mason             | : | 8 | TV/Radio Mechanic | : | 2 |
| Money Lenders | : | 11 | Cold Storage      | : | 0 | Milk Dairy        | : | 0 |
| Cobbler       | : | 3  | Cycle Repair Shop | : | 2 | Cyber Shop        | : | 0 |

## Agricultural input shops in the village

| Input                   | Available in village<br>(Yes/No) | If NO, name of nearest<br>available place | Distance from village<br>(km) |
|-------------------------|----------------------------------|---|-------------------------------|
| Seed                    | Yes                              | -   | 0.5                           |
| Fertilizer              | Yes                              | -   | 0.5                           |
| Pesticide               | Yes                              | -   | 0.5                           |
| Machinery-purchase      | No                               | Fulbari                                   | 2.0                           |
| Machinery-custom hiring | No                               | Fulbari                                   | 2.0                           |

Access to basic facilities of the sampled households

| Facilities               | Available in village | If YES, no. of house<br>having access | Percentage of<br>total households |
|--------------------------|----------------------|---------------------------------------|-----------------------------------|
| Health facility          | Yes                  | 40                                    | 100                               |
| Drinking water facility  | Yes                  | 40                                    | 100                               |
| Toilet facility          | Yes                  | 40                                    | 100                               |
| Bathroom facility        | Yes                  | 25                                    | 62.50                             |
| Tap water connection     | Yes                  | 1                                     | 2.50                              |
| Village electrification  | Yes                  | 12                                    | 30.00                             |
| Dish connection/TV cable | Yes                  | 2                                     | 5.00                              |
| Cooking gas facility     | No                   | -                                     | -                                 |

Access to sources of information of the sample households

| Sources of information               | Numbers (Index) | Rank |
|--------------------------------------|-----------------|------|
| Block supervisor/union agri. officer | 5.15            | 3    |
| Community leaders                    | 5.89            | 2    |
| Community or local news paper        | 0.09            | 10   |
| Input supplier                       | 4.58            | 4    |
| National news paper                  | 0.18            | 9    |
| NGOs                                 | 2.84            | 6    |
| Relatives, friends and neighbors     | 6.33            | 1    |
| Television                           | 2.71            | 7    |
| Upazila agriculture officer          | 2.56            | 8    |
| Village panchayat/leader (Chairman)  | 3.31            | 5    |

## I) GOVERNMENT WELFARE PROGRAMS

Access to social safety net programs of the sample households

| Government program  | Beneficiaries <sup>*</sup> | Average amount<br>(Tk/year/hh) |
|---|----------------------------|--------------------------------|
| Food for work   | 3 (7.50)                   | 7667                           |
| Integrated mother & child development program                       | 17 (42.50)                 | 384                            |
| Family planning   | 30 (75.00)                 | 443                            |
| Old aged pension  | 2 (5.00)                   | 3600                           |
| Physically handicapped pension                                      | 1 (2.50)                   | 7200                           |
| Scholarships and economic assistance                                | 20 (50.00)                 | 1151                           |
| Free health camps   | 22 (55.00)                 | 332                            |
| Vulnerable group feeding (VGF)                                      | 1 (2.50)                   | 600                            |
| Vulnerable group development (VGD)                                  | 4 (10.00)                  | 3775                           |
| Fair price shop   | 3 (7.50)                   | 500                            |
| *Figure in the parenthesis indicates percentage of total household. |                            |                                |

Rasun Shimulbari Village at a Glance