

FINAL

FOOD SECURITY AND NUTRITION INITIATIVES IN BANGLADESH:

AN EXERCISE INTO MAPPING OF FOOD AND NUTRITION SECURITY PROGRAMMES

DOCUMENTATION, ILLUSTRATIONS AND RECOMMENDATIONS

10 June 2013

Submitted to
World Food Programme (WFP)

Submitted by

Economic Research Group (ERG)

1st Floor, House # 342, Road # 25, Mohakhali DOHS, Dhaka - 1206, Bangladesh

Phone: 880-2-8810636, 880-666-2685204, e-mail: info@ergonline.org, Fax 880-2-9891783

Web: <http://www.ergonline.org>



An Exercise into Mapping of FNSPs in Bangladesh*

I. Introduction

Economic Research Group had its first taste of mapping exercise back in 2007 for a study on exclusion. The database included upazila level information on the presence of several programmes by individual NGOs. With a search engine in place, one could identify all possible mixes of the three – upazila, NGO and programme. Some of the maps were preloaded, since the required software for online generation could not be included. In the absence of any visible demand, the passion to update and deliver a public good soon withered; though the database may still be viewed at ERG website.

The Millennium Development Goals Fund (MDG-F) initiated a project on Protecting and Promoting Food Security and Nutrition for Families and Children in Bangladesh. One of its intended outcomes had been to “Strengthen(ed) food security and nutrition information systems for planning, monitoring and evaluation”. One of the activities under this component had been to “develop Information System (database) on Food Security and Nutrition situation in the country”. With a limited budget that included a commitment to deliver an assessment report as well, the ERG team developed a data compilation framework with emphasis on capturing Food and Nutrition Security Programmes (FNSPs); and compiled a dataset, mostly relying upon secondary sources with additional field level surveys in Dhaka metropolitan area and in headquarters of 25% of the districts.

The document contains the guidelines for using the database on upazila-level coverage of Food and Nutrition Security Programmes (FNSPs) that the Economic Research Group (ERG) developed with financial supports from the World Food Programme (WFP) in 2011-12. It also details on the sources and structure of the data (Sections II and III), and Section IV shows coverage under nutrition programmes and illustrates the mapping exercise one can do with selected examples. Section V highlights various purposes for which a regularly updated data within the proposed structure may be used. The concluding section (VI) recommends ways to ensure regular updating of the data and their effective use for planning and programme people.

II. Process and Methodology

The whole process had several distinct steps:

- A comprehensive list of all projects under the Country Investment Programme (CIP) was prepared and basic information on those was computerized.
- Several sources were consulted to prepare a fairly comprehensive list of government and non-government organizations engaged in FSNPs.

* The exercise on mapping was coordinated by Sajjad Zohir, Research Director, ERG. Sanam Rahman, Kashfee Ahmed, Nabil Ahmed, Mizanur Rahman and Ful Kumar Modok assisted in data collection and compilation. Ratib M Ali had processed the data to generate several maps and had assisted organizing the documentation. Two other members of the ERG team, Nazme Sabina and Ruhul Amin, contributed primarily to the second component on assessment of two selected FSNPs.

- Past exercises on mapping, including the REACH mapping exercise in Satkhira, were reviewed to develop an initial design of the data compilation framework. Several stakeholders were consulted to finalize a questionnaire that would capture organization-specific programme/project undertakings.
- Several routes (see below) were availed to collect relevant information.
- The data were compiled in an excel file, which included interlinked worksheets with separate lists of projects/programmes, agencies, and had detail description of variables and value labels for codes used.
- For the purpose of demonstration, the data had been processed to produce several maps that reveal information on current situation with regards to FSNPs.

The terms of reference confined the scope of the data compilation to secondary sources of information only. Once engaged, it was realized that cooperation was less forthcoming from agencies which were previously expected to have such data. Moreover, those available in the net and in published documents and reports were inadequate. While information was collected from NGO websites, project documents, internal data from few major programmes (Shouhardo, CLP), it was apparent that the coverage was rather limited. Several steps were subsequently taken to ensure wider coverage: emails with a questionnaire was sent out to a large number of NGOs, INGOs and external development partners (EDPs); field enumerators were directly engaged by ERG to collect information from NGOs with head offices in Dhaka city; cooperation from several networks of NGOs were sought to collect information; and separate contracts were negotiated with apex bodies who employed local NGOs in more than 16 districts to administer questionnaire survey on NGOs operating in those districts.

III. Structure and Indicators/Variables covered

Table 1: General Structure of the Data

First tier	2 nd tier	3 rd tier	4 th tier (not created)
Project/ Programme (1)	Implementing agency (NGOs)	Location of activity (sub-tiers: division, district, upazila)	Programme/project Components (presence of) (2)
P1	NGO1	Upazila12	Yes/No
P1	NGO1	Upazila20	Yes/No
P1	NGO1	Upazila35	Yes/No
P1	NGO5	Upazila20	Yes/No
P1	NGO5	Upazila50	Yes/No
P1	NGO5	Upazila60	Yes/No
P2	NGO9	Upazila35	Yes/No
P2	NGO9	Upazila40	Yes/No
P2	NGO13	Upazila40	Yes/No
P2	NGO13	Upazila43	Yes/No

Note: (1) Project Name, ERG Serial, Project Abbreviation; Project objective, Project Duration, Sponsors and Coordinators, Project Status, Program Type, Intervention; (2) Transfers (cash, kind, assets, inputs), Breast feeding Initiatives, Agricultural Supports, Behavior Change Communication, Nutrition Education. See details in Table 1.

Table 2: List of Variables Covered

Description of variables	Variable Name
1. Intervention agency	IA_abb
2. Intervention agency code	IA_code
3. District Name	District
4. Upazila Name	Upazila
5. Geocode (BBS)	Geocode
6. Extent of Coverage within a upazila (partial/full)	Coverage
7. Cash transfers (Yes/No)	Cash_tr
8. Test Relief/Gratuitous Relief (Yes/No)	TRGR
9. Vulnerable Group Development (Yes/No)	VGD
10. Open Market Sales (Yes/No)	OMS
11. Cash/kind (non-asset) transfer (Yes/No)	Nasset_tr
12. Asset transfer (Income Generating Activity) (Yes/No)	Asset_tr
13. Transfers through employment (Yes/No)	Emp_tr
14. Supports to agricultural production (Yes/No)	Ag_prod
15. Homestead gardening (general) (Yes/No)	Garden
16. Transfer of agricultural inputs (Yes/No)	Ag_tr
17. Marketing supports (Yes/No)	Mkt_supp
18. Early initiation of/exclusive breastfeeding (EBF) (Yes/No)	EBF
19. Complementary feeding (with EBF)	EBF_comp
20. Supplementary feeding (Yes/No)	Feed_supp
21. Behavior Change Communication (BCC) household (Yes/No)	BCC_hh
22. BCC health facility (Yes/No)	BCC_health
23. Nutrition education outside schools (Yes/No)	Nutr_out
24. Nutrition education in schools (Yes/No)	Nutr_in
25. Home-gardening with nutritional focus (Yes/No)	Homegarden
26. Bio-fortification with field crops (Yes/No)	Biofort
27. Vitamin A supplementation (Yes/No)	VitA
28. Iron-folate supplementation (Yes/No)	Ironfol
29. Iron fortification (Yes/No)	Iron_frt
30. Adequate salt iodization (Yes/No)	Salt
31. Micronutrient powder/Sprinkles (Yes/No)	Micronutr
32. Zinc supplementation (Yes/No)	Zinc
33. Therapeutic feeding (Yes/No)	Therapeu
34. Health service delivery (Yes/No)	Hlth_srvc
35. Water, Sanitation & Hygiene (Yes/No)	WASH

Note: Yes = 1; No = 2.

Table 1 (continued)

Description of variables	Variable Name
36. % of rural households below 1805 Kcal pppd, 2010	
37. % started breastfeeding within one day of birth, 2009	
38. U5 Mortality Rate, 2009	
39. Number of cattle per household, 2008	
40. % of households owning sanitary toilets, 2010	
41. % of households with access to safe drinking water, 2010	

Note: Variables 36 to 41 were compiled separately from another ERG study.

Tables 1 and 2 are self-explanatory. The former lays out the basic structure, which is further elaborated in Annex 2, where the contents of the worksheets in data file are described. One may note inclusion of several upazila level (non-programme) variables compiled/computed from BBS data. These have been used for specific illustrations with maps.

IV. Coverage according to Nutrition Interventions and Illustration with Maps

IV.1 Coverage under Nutritional Projects

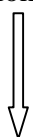
EBF, Vitamin A, mineral fortification, etc. are some of the direct nutritional interventions; while home-gardening, water and hygiene related projects, latrine, etc. are some of the indirect interventions to improve the nutritional status of target households and communities. When spatial coverage is at issue, two ways of representing those on maps have been shown in Map 1 to Map 6 – presence of a programme/project in a upazila, and number of on-going projects in a upazila on a single theme. In stead of number of projects, one could portray number of NGOs operating on a given theme in particular upazila. The data also permits one to show coverage of areas under an NGO, irrespective of any programme (Map 7), which could be shown for a single type of intervention as well.

IV.2 Further Illustrations with Maps

Coverage of a programme is less interesting unless superimposed over other variables of interest. Two broad categories of such variables may be identified: initial conditions that justify geographic targeting; and outcome variables that are meant to capture achievements (and failures) of programme interventions. For example, one would expect greater number of transfers to be made to areas where incidence of poverty is high, and asset transfers to be made to regions where there are fewer assets (say, cattle heads per household). On similar grounds, one may expect relations between prevalence of EBF practices or under-5 child mortality rate with EBF programmes; between percentages of households with access to safe drinking water and presence of water-related projects; and between vegetable consumption and programmes on home gardening. There is however an inherent problem – the two roles of the same variable, as cause of resource allocation and as effect of a programme intervention, cannot be distinguished with cross-sectional

information. Thus, classifications with different values of two variables require careful interpretation. Since the variable of interest (e.g., percentage of households below poverty line income, number of cattle per household, etc.) is often a continuous variable, the exercise to generate the maps (8 to 14) had to recode the variables into three groups – ‘high’ implies top one-third, ‘low’ implies bottom one-third, and ‘medium’ implies one-third in the middle. Since a programme/project is either present or not present (absent) in an area, Table 3 identifies the six possible outcomes that an area may be associated with.

Table 3: Classification Criteria when multiple variables considered

Category	Resource perspective	Outcome perspective
Low and absent		Neutral
High and present		Positive outcome – success
Medium and absent		Neutral
Medium and present		Neutral
High and absent		Neutral
Low and present		Good allocation

Note: It is assumed that ‘low’ is first column is an undesirable state and ‘high’ is desirable. For variables that are defined in reverse scale, the interpretation has to be adjusted accordingly.

As mentioned earlier, the cross datasets can be portrayed from two perspectives – either prevalence rates influence agencies to open projects, or agencies and their programmes affect prevalence rates. The first reflects appropriateness in resource allocation, thus, each categorization on the map has a specific meaning within a continuum. The variable may be turned into a scalar category by arranging it from “low and absent” indicating non-allocation (or, misallocation) of resources even when there is a need (i.e., prevalence is low), to “low and present”, indicating a proper allocation of resources (i.e., more resources to areas with low prevalence in order to correct the problem).

Looking at the categories from an outcome perspective, most of the categories do not translate into any meaningful explanation. There are however two exceptions, “high and present” and “low and present”, the former indicating some degree of success (or, non-failure) and the latter indicating success assuming that the programme was put in place when the prevalence was low. As may be noted, in the absence of information on the past, any attempt to draw simplistic inference may be misleading.

Given two almost contrary interpretations, use of shades to express gradation implying a scale in a given dimension, is rather difficult. The categorization was arranged in terms of resource allocation, with the misallocation coming first (lighter shade) and good allocation coming last (darker shade) on the key.¹ There are two exceptions to this rule in the seven cases considered in Maps 8 to 14; ‘low’ is better in cases of under-5 mortality rate and also in case of poverty incidence. One therefore needs to interpret the colors accordingly. Table 4 below lists all variables for which the maps (8-14) have been generated.

¹ The only exception in the seven cases considered is the under-5 child mortality rate, where ‘low’ is better than ‘high’.

**Table 4: Description of Maps capturing two Variables
(See Annex 4)**

Map #	Variable of interest sourced/computed from BBS data	Programme/mapping data
8	Percentage of rural households under 1805 Kcal per person per day	Transfer
9	Number of cattle per household	asset transfer
10	Percentage starting Early Breast Feeding	EBF
11	U-5 mortality rate	EBF
12	Access to sanitary toilets	latrine related projects
13	Percentage of households with access to drinking water	water related project
14	Percentage of total Kcal from vegetables	home gardening program

V. Potential Uses of data bases and their relevance to Policy decisions

Geographical targeting is commonly practiced to allocate scarce resources and most planners, both within and outside the government, apply certain criteria to distribute the resources. Small areas estimation based poverty mapping is one set of information which has been commonly used by the government and the WFP to allocate resources to upazila and union levels. Some of the maps illustrated earlier allure to such use of the mapping data, which however, requires one to compile additional data on such variables as poverty incidence, mortality rates, good practices in health and hygiene, etc. It is important to note that the current mapping provides an entry point to associate specific programme needs corresponding to state of food and nutrition security in an area.

Coordination among various external development partners keen on supporting FNSPs; across various Ministries and departments within the government and between the EDPs and the government are necessary to avoid duplication of efforts. It is also important to ensure efficacy in the choice of intermediary agencies (NGOs), whose limited human capacities are often stretched and whose performance may be adversely affected due to dealing with divergent demands from multiple sponsors. In general, numerous micro issues related to aid effectiveness and aid coordination may be addressed better with a regularly updated database such as the one under consideration. A centralized database could be a one-stop center for government planners and future donors alike to inspect the status quo and make informed and rational allocation of resources. Planners and donors can direct their future resources to regions that have received disproportionately less resources in the past.

The use of the database is not confined to only regional resource planning, with additional data, one may also undertake cross-sectional analysis using suitable statistical package. Moreover, information compiled over several years will enable one to address

the causality issues making way for continuous monitoring and assessment of individual programmes.

In summary, the database allows one to know the status quo. Maps may be generated to capture and disseminate the situation in terms of space, agency or program, or some combination of all three, allowing parties to gain full in-depth understanding about different subsections of FSN projects and agencies involved in the field. Such knowledge will help actors make informed decisions when allocating resources in the future, with regards to which program/region needs additional funding and which program/region can be dropped for the time being. Prior knowledge helps government and non-government agencies in deciding on appropriate programme placement.

Spatial maps of FSN interventions, superimposed on spatial maps of FSN condition, will provide actors with information about the effectiveness of particular programs or mixes of programs. For instance, superimposing the map of water and hygiene-related projects on the map showing the prevalence of water-borne diseases can show the effectiveness of projects that target hygienic and sanitary practices. Moreover, superimposition on actual FSN data may also illustrate which breed of a project is most effective. Working within the example of water and hygiene, the superimposition may show whether targeting school children or women or a blanket target is the most effective method to reduce the spread of water-borne diseases.

VI. Recommendations for data updating and their timely uses

An earlier experience with mapping was noted at the beginning of this report as a word of caution. It takes several months of effort and resources to collect the data; and yet, there is no assurance of complete coverage with the survey instruments administered. To repeat the whole process again the following year would be like reinventing the wheel, which can be extremely expensive, not to mention defeating the efficacy of a live database. Therefore, to maintain a dynamic and regular updating of database, surveys cannot constitute the core of regular undertaking – it may at most act as supplementary initiatives to reduce the gaps.

Annex 5 describes the institutional space relevant for design and implementation of FSNPs in Bangladesh. It also reveals the sources of information on programmes/projects. The annual development projects undertaken annually by the government, the CIP projects compiled by the FPMU with FAO supports, list of projects/programmes independently supported by the EDPs are initiated at upper tiers and therefore one expects the information to exist at that level. As the Figure shows, the size of effort to collect information increases as one tries to reach the actors at the bottom tiers, such as the implementing NGOs. The ERG exercise intended to confine at the top, but ended up extending its efforts to the bottom for lack of adequate supports at the top. Regular updating of data is not feasible in that manner; and requires close cooperation amongst actors at the top – government agencies and the EDPs. Ideally, this may be coordinated by a Secretariat, similar to the role that FPMU plays in the context of CIP. One suitable

candidate for setting up the information hub on FSNPs is the IPHN. If a specialized unit is assigned to the task of overseeing the process of reaching consensus on the information structure, liaison between relevant agencies within the GOB and the EDPs to ensure regular inflow of data; and address the technicalities involved to make the portal dynamic with provisions for the individual actors to update from their ends – the task will be an easy one. The Secretariat may like to use in-house resources or reach MOUs with appropriate research institutions for critically examining the quality of data and analyzing the data for public dissemination and scrutiny. It is important to recognize that such dataset get sustained recognition only by remaining open to public and with regular feedbacks from the critics.

Annex 1
Questionnaire administered

Economic Research Group
 1st Floor, House # 342, Road # 25, DOHS Mohakhali, Dhaka - 1206.
 Phone Number: 02-9891783

Name of Organization:

Contact Person:

Phone & Email:

A. Please list all the projects you are currently implementing (those directly related to food security and /or nutrition and also those where food security and nutrition are components). Please list all projects related to Micro Finance as well.

Sl no.	Name of the project	Abbreviation	Start Date	End Date	Sponsor	Focus (programme type)*	Government Agencies Involved
1							
2							
3							
4							
..							
9							
10							

*Explanatory Note on Program type: Food Security=1, Nutrition=2, Food Security and Nutrition=3, Microfinance only=4, Food Security, Nutrition and Micro Finance=5, Health and Nutrition=6, Others=7 (Specify).

B. Please provide the following information SEPARATELY FOR EACH OF THE PROJECTS listed in A. (Copy whole of Section B and paste at the end for another project.)

Name/abbreviation of the Project:

1. Fund Manager:
2. Coordinating Agencies (Please indicate the lead agency):
3. General Objective (as stated in the project document):

Please tick (√) the appropriate options from the following lists:

4. Programme Type

Food security		Micro Finance only	
Nutrition		Food security and nutrition and micro finance	
Food Security and Nutrition		Health and Nutrition	

5. Intervention Spheres (spheres of project activities)

Education/knowledge/training/skills development		Non-food/asset transfers	
Nutrition		IGA	
Health		Food grain market	
Sanitation		Labor market/ employment	
Health & sanitation		Finance/credit market	
Food crop production/input market		Land (/rental market)	
Fisheries and/or livestock		Housing	
		Infrastructure	
		Others. Please mention	

6. Who are you targeting?

Individual		Individual and Household	
Household		Household and Community	
Community		All	

If targets vary by components, please describe in the space below (*Details*):

7. What demographic groups do you target?

<i>Children:</i>		<i>Adult:</i>	
0-6 months		Male	
0-24 months		Female:	
0-59 months		Female General	
6-9 years		Female Pregnant	
10-12 years Girls/Boys		Female Lactating	
13-17 years Girls/Boys		Female Widowed/separated	
Disabled		Female adolescent	
Others (Please mention)		Disabled	
		Elderly	
		Others (Please mention)	

11. Activities undertaken by you under the PROJECT in the upazilas mentioned above

(Please tick ✓)

Cash transfers		Nutrition education outside schools	
Test relief/ gratuitous relief		Nutrition education in schools	
Vulnerable group development		Home gardening with nutritional focus	
Open market sales		Bio-fortification with field crops	
Cash and kind transfers		Vitamin A supplementation	
Transfer of assets		Iron – folate supplementation	
Transfers through employment		Iron fortification	
Supports to agricultural production		Adequate salt iodization	
Homestead gardening (general)		Micronutrient powder / sprinkles	
Transfer of agricultural input		Zinc supplementation	
Marketing supports		Therapeutic feeding	
Early initiation of exclusive breast feeding (EBF)		Health service delivery	
Complementary feeding (with EBF)		WASH	
Supplementary feeding		Household water treatment, education and equipment	
Behavioral change communication – household		Hand washing with soap	
Behavioral change communication – health facility		Latrine provision and usage promotion	
Liaison to receive government services		De-worming	

12. If you are an MFI please provide the following information:

Total Outstanding Loans _____ (Taka)

Total Number of Borrowers _____

13. In case some upazilas do not have all the above programmes (ticked), please mention and/or provide further details:

14. Any other information you consider relevant for including your activities in the mapping on food security and nutrition in Bangladesh:

In case you want to contact the Principal Researcher, please call Dr. Sajjad Zohir, Research Director, ERG, at 01711544995.

<<THANK YOU >>

Annex 2

Description of Various Worksheets in Data File

Project Sheet

The Project Sheet contains basic information regarding the programs or projects. This includes program names, assigned ERG Serial, abbreviation, program status and sources of information (CIP, LCG, SSN or other lists). If the program is included in the Bangladesh Government's Country Investment Plan or CIP list, the particular CIP project code provided. Furthermore information on project duration and value, sponsor and coordinating agencies involved, program objectives and type (Food Security, Nutrition, Health, Microfinance, or some combination), interventions spheres covered (education, nutrition, health, sanitation, IGA, Food Crop production, etc.), targeting level (individual, household, community), and inclusion/exclusion criteria are also included.

Project Implementing Agency Sheet

Once a program of interest has been identified from the Basic Program Sheet, its Upazila-wise implementation can be found in the Project IA Sheet. For example, if we wish to look at the SHOUHARDO II programme (ERG Serial No. 241), we can find its corresponding information in the Project IA sheet under the same abbreviation and ERG serial. It can be observed that the SHOUHARDO II programme extends to several additional rows in the Project IA sheet, since it is implemented by multiple NGOs in several Upazillas. ASEAB for example implements this programme in Pabna Sadar, Bera and Sujangar Upazillas.

The Project IA Sheet contains information on the project Serial number and abbreviation, project objective and targeting criteria (as this can vary across NGOs even on the same project), division, district and Upazilla level covered, and the intensity of union coverage (complete or partial). Lastly, the presence of various interventions are gauged by means of yes or no responses. These interventions include Cash transfers, Test Relief and Gratuitous Relief, Vulnerable Group Developments, Open Market Sales, Various Transfers (Cash/Kind and Asset), Supports to Agricultural Production, Homestead Gardening, Transfers of Agricultural Inputs, Marketing Supports, Early Initiation of Exclusive Breast Feeding, Complementary and Supplementary feedings, Behavioral Change Communications (at both household and health facility levels), Nutrition Education (At and outside schools), various micronutrient supplementations (iron, salt, zinc), Homestead gardening with nutritional focus and Biofortication with field crops, Health Service Deliveries, and various sanitation initiatives (WASH, handwashing with soap, de-worming, latrine provision etc.) Lastly, the sheet presents the outstanding loans and number of clients/direct beneficiary figures from the various projects.

Define Sheet

This sheet contains the coding used for the drop down menus in the Basic and Project IA sheets. This includes codes for Source of Info, Sponsors, Coordinators, Programme Type,

Interventions Sphere, Target Level (population, children, adult and female), Targeting Criteria (for inclusion and exclusion), Implementing Agencies, Area Codes (Division, District and Upazila), Presence of Intervention (Yes or No), Degree of Coverage, etc. The headings are fairly self explanatory. **It is recommended that the existing options not be altered as that may disturb the data.** However, there is a provision for adding additional options or categories as required

All Implementing Agencies Sheet

This is a comprehensive listing of the NGOs currently operating in Bangladesh. The ERG serial number used here corresponds with the Serials used in the Basic Project, Project IA and Define sheets. The names, abbreviations and organization type are also provided (whether local, international, or government agencies)

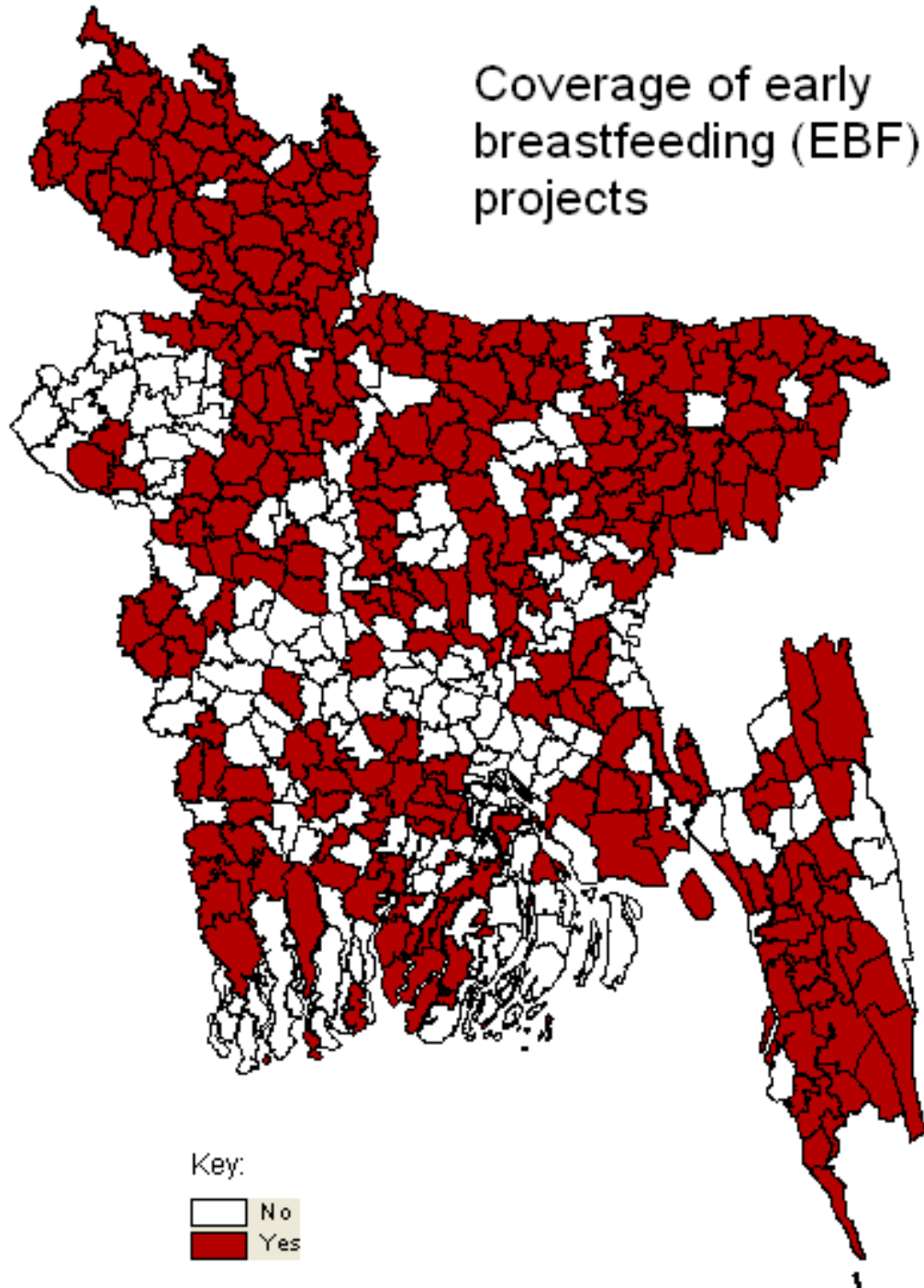
Annex 3

HOW TO CREATE BANGLADESH GEOMAP FROM SCRATCH

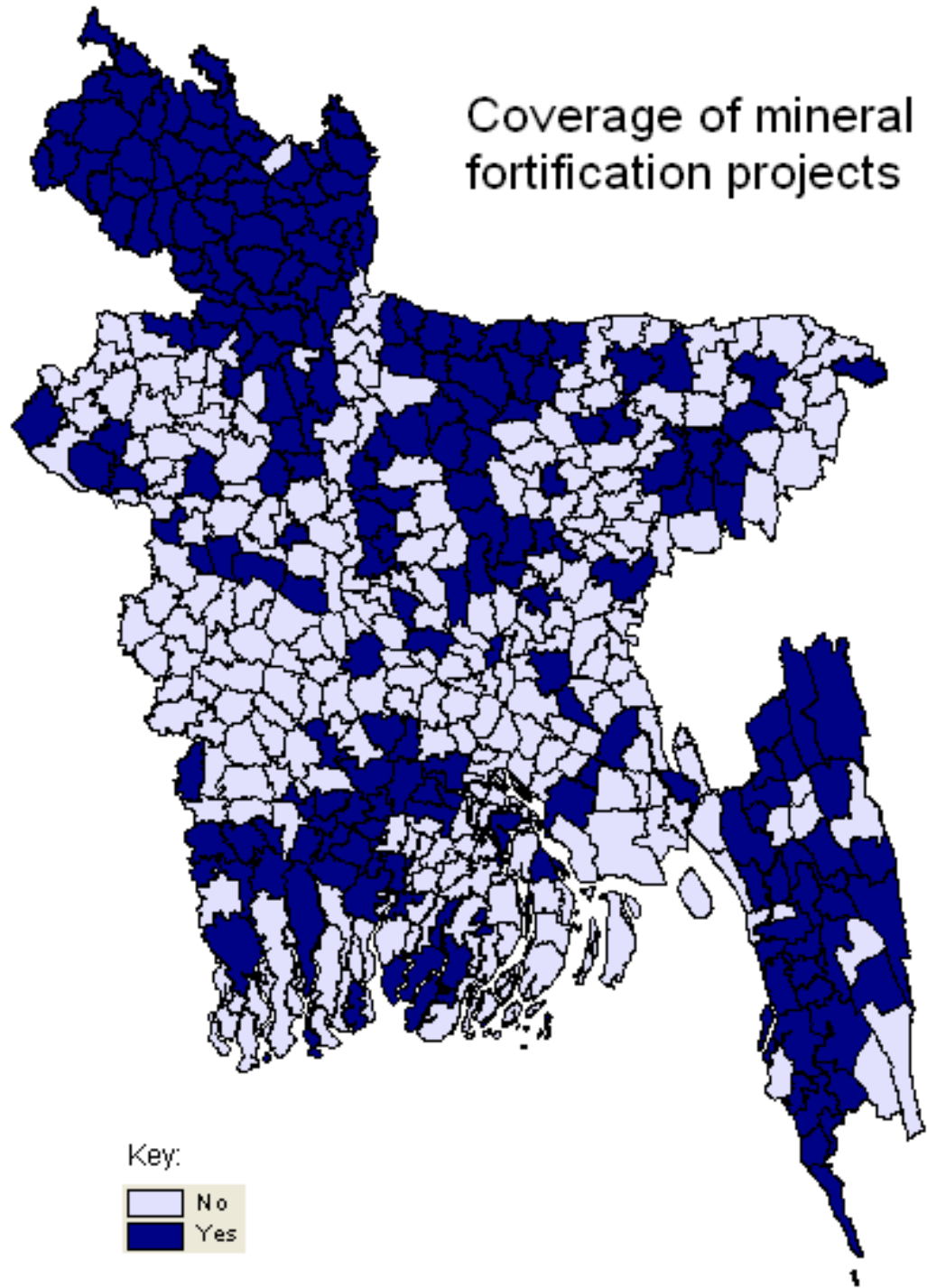
Installation: Copy the folder “ERG-Mapping” and paste it directly in Drive D.

D:\ERG-Mapping	\Start <ul style="list-style-type: none"> • Start file.xls • Macro.xls 	<ul style="list-style-type: none"> • Obtain the data file, rename it to “Start file.xls” and paste it in the Start folder. • Open the two files “Start file.xls” and “Macro.xls”. • Make sure macros are enabled on Microsoft Excel.
	\Base <ul style="list-style-type: none"> • rawfile.xls 	
	\Preload <ul style="list-style-type: none"> • MappingCommand.sps • geocode_list.xlsx 	<ul style="list-style-type: none"> • Open and run MappingCommand.sps. <i>SPSS aggregates the data file and converts it into a database (IV) file. The intermediate SAV file is saved in the intermediate folder; the database file is saved in DBFiles folder.</i>
	\Intermediate <ul style="list-style-type: none"> • Aggregate.sav 	
	\DBFiles <ul style="list-style-type: none"> • mapready.dbf 	
	\Preload\Mapping <i>(this contains the shape files for ARCView)</i>	<ul style="list-style-type: none"> • Open ARCVIEW, click on New View and load the “edited.shp” theme from the folder D:\ERG-Mapping\Preload\Mapping. • With the theme opened, click on the button “Open Theme Table”. • Go to the Tables panel, and add the table “mapready.dbf” from D:\ERG-Mapping\DBFiles • Click on the Geocode field header (the header darkens) on “mapready.dbf”, and then click on the Geocode field header on “Attributes of Edited.shp”, and then click Join.
\End <i>(save end maps here)</i>	<ul style="list-style-type: none"> • Once joined, return to the View panel to generate map of choice. <i>This allows the user to manipulate the map however s/he chooses to. Maps can be saved in the End folder.</i> 	

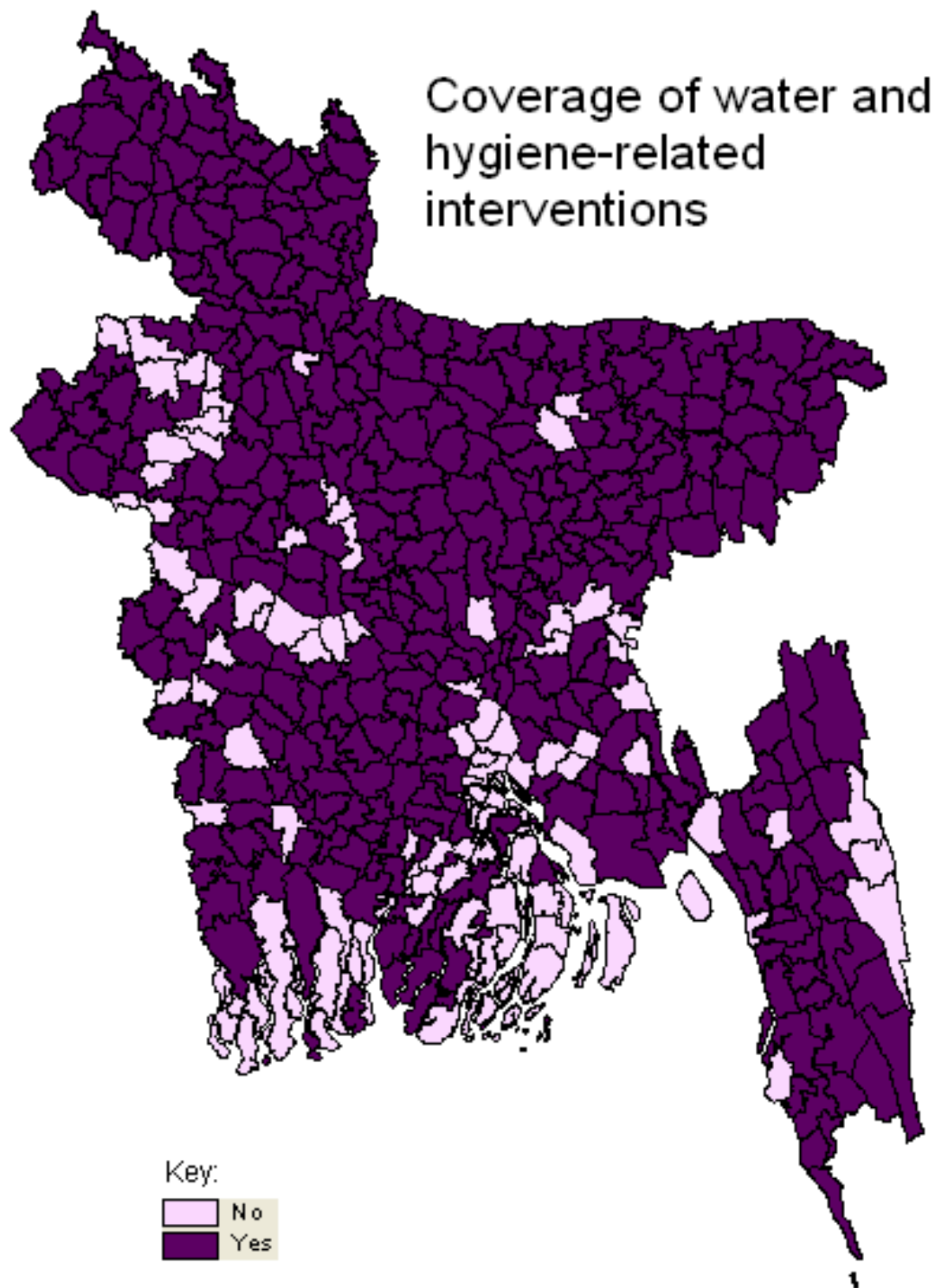
Annex 4
Maps



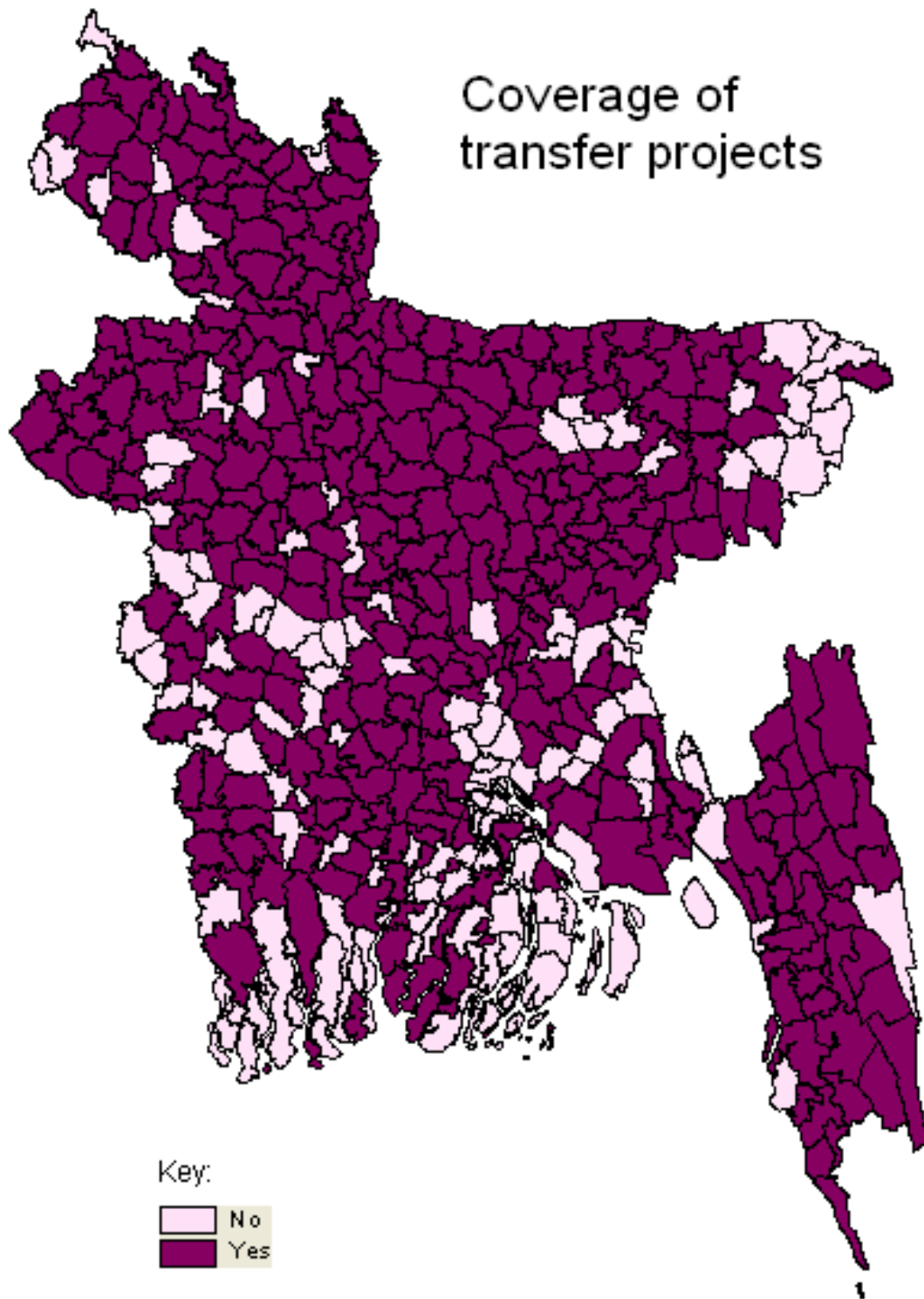
Map 1



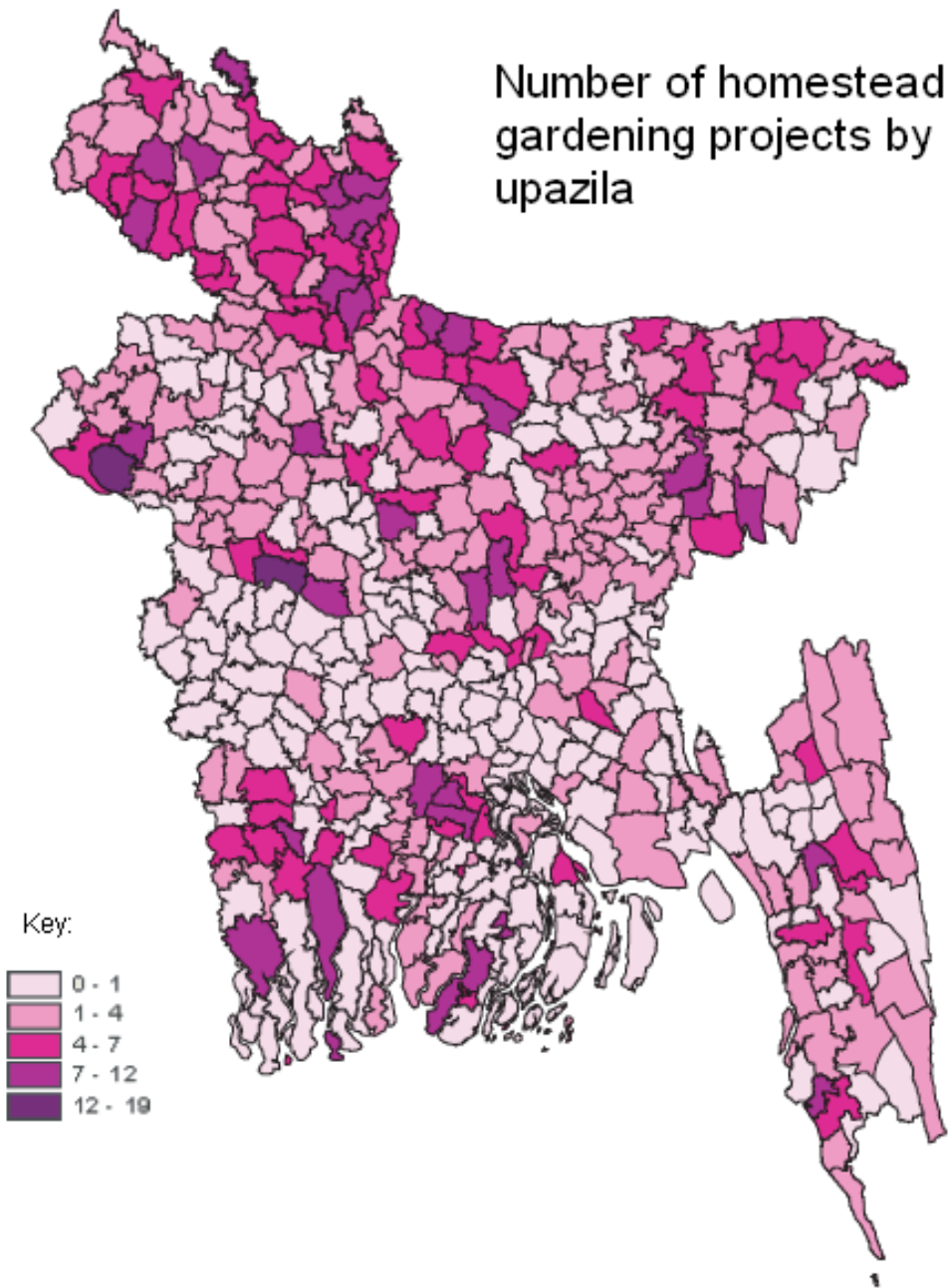
Map 2



Map 3

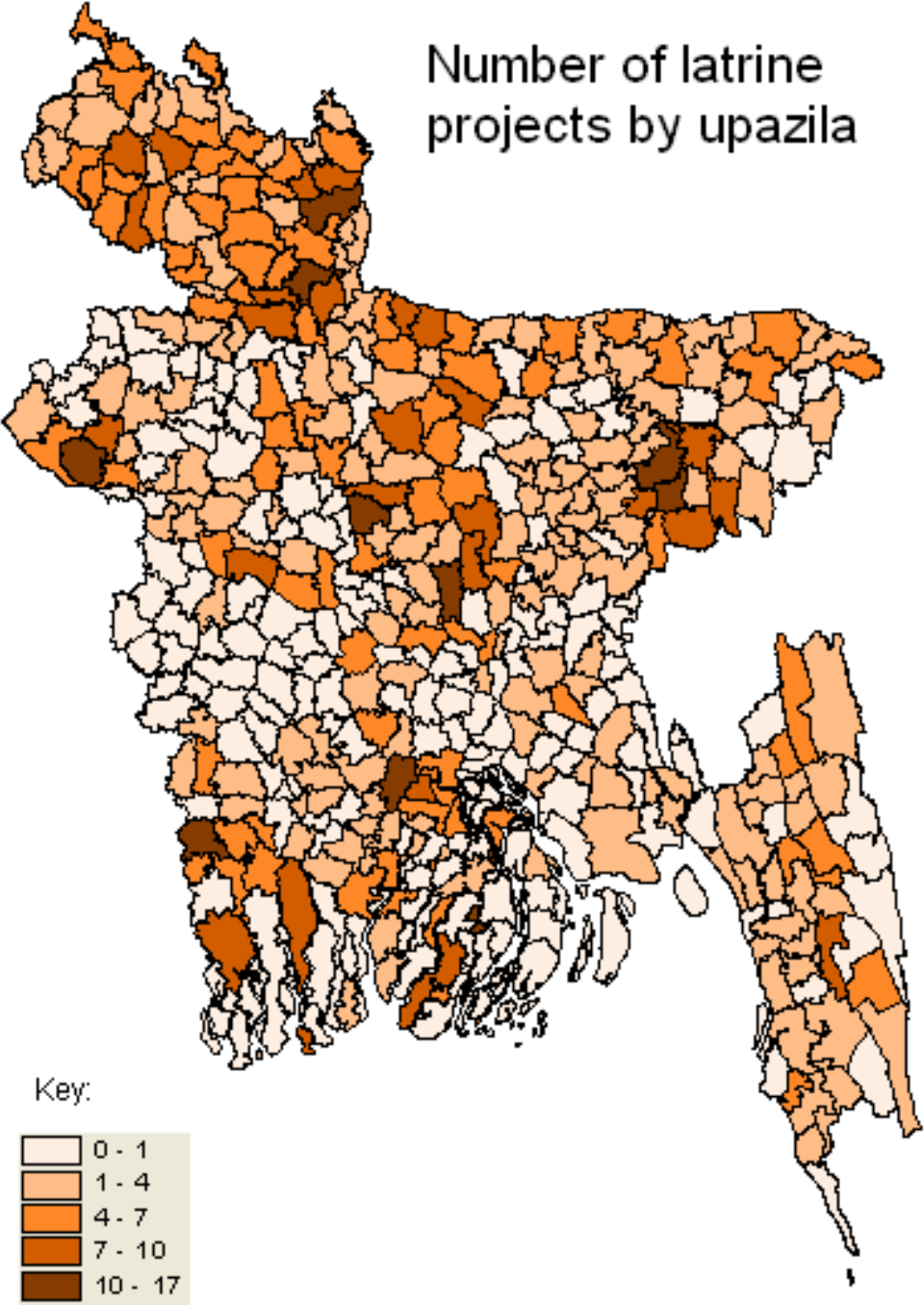


Map 4



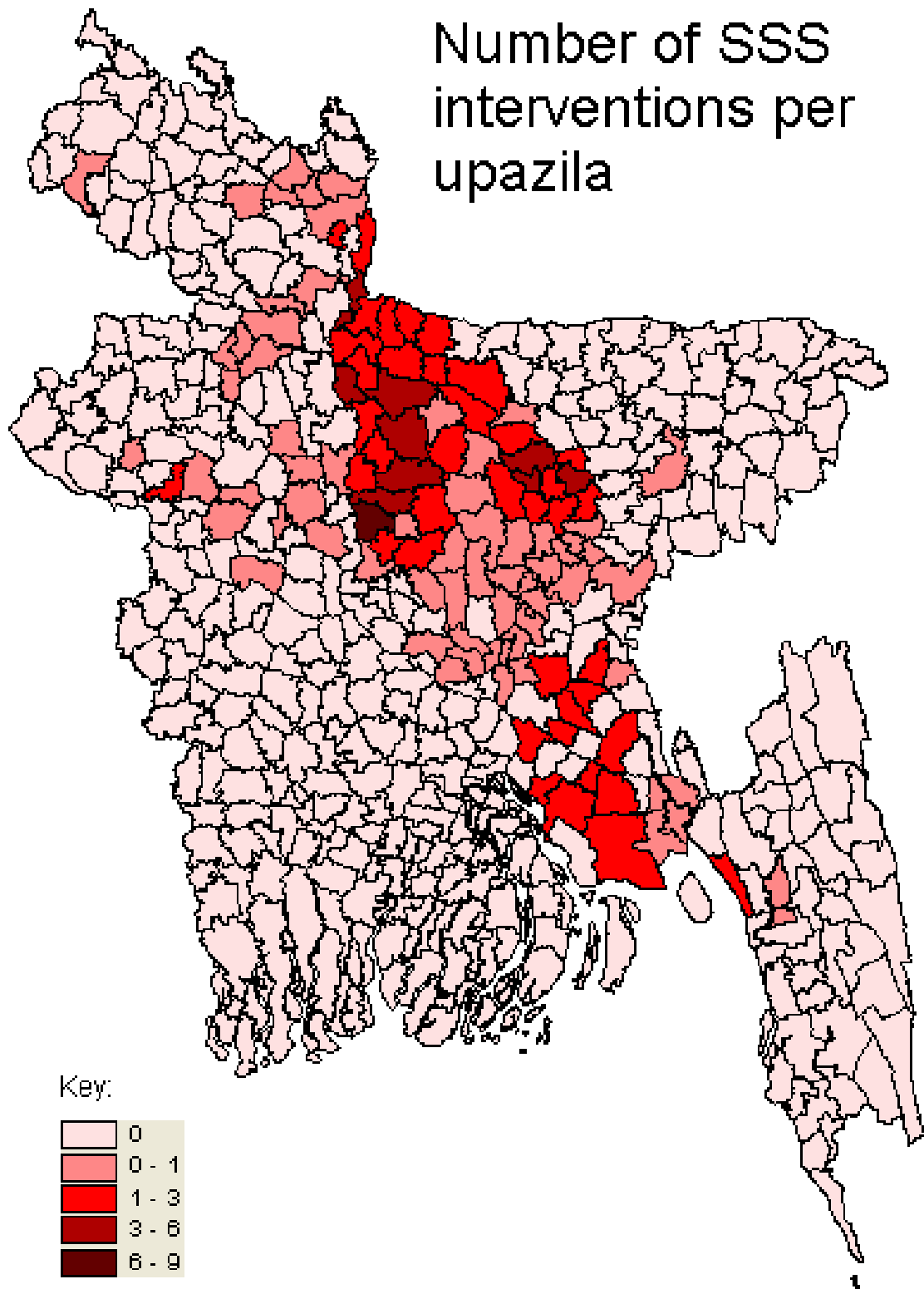
Map 5

Number of latrine projects by upazila

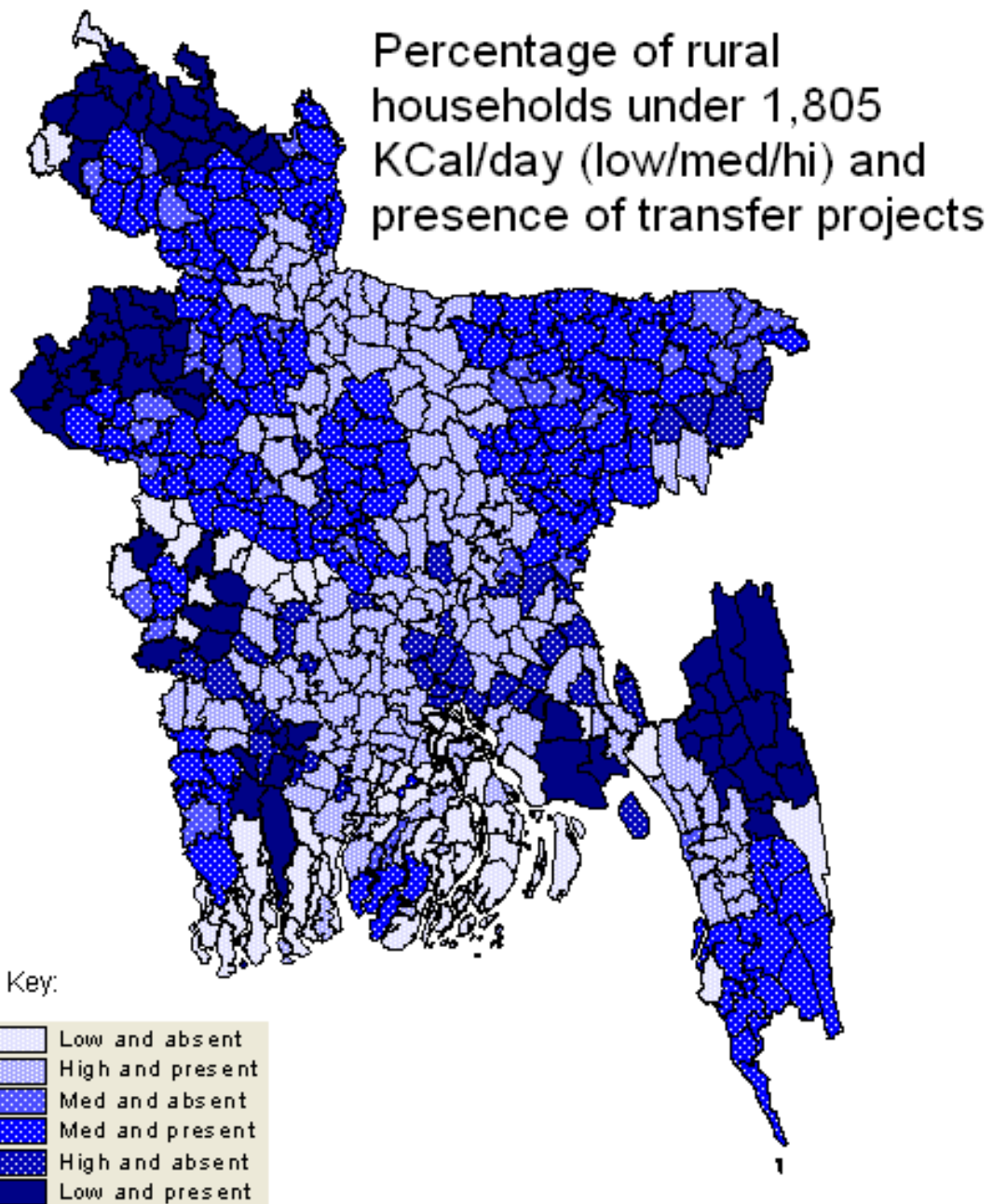


Map 6

Number of SSS interventions per upazila

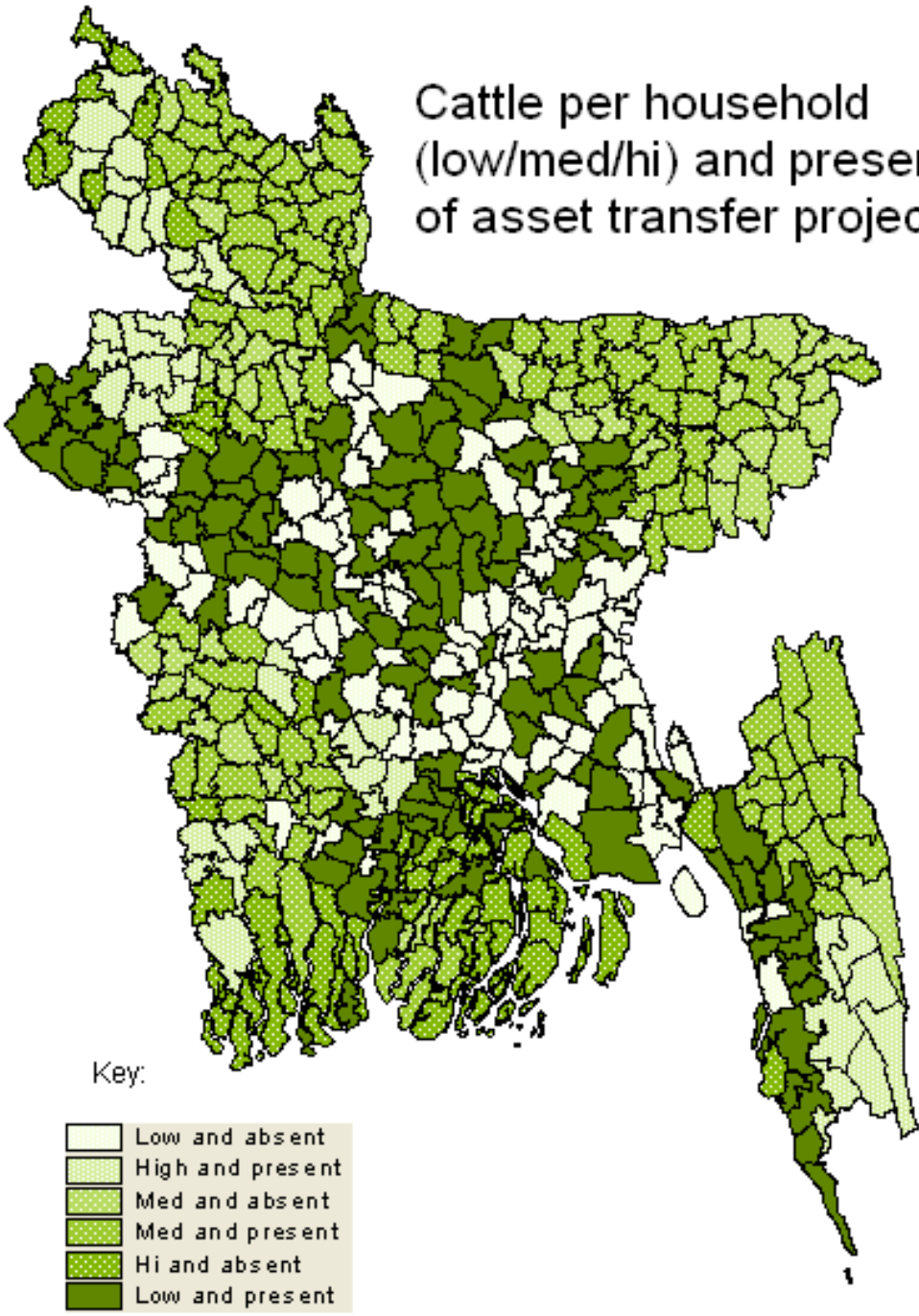


Map 7



Map 8

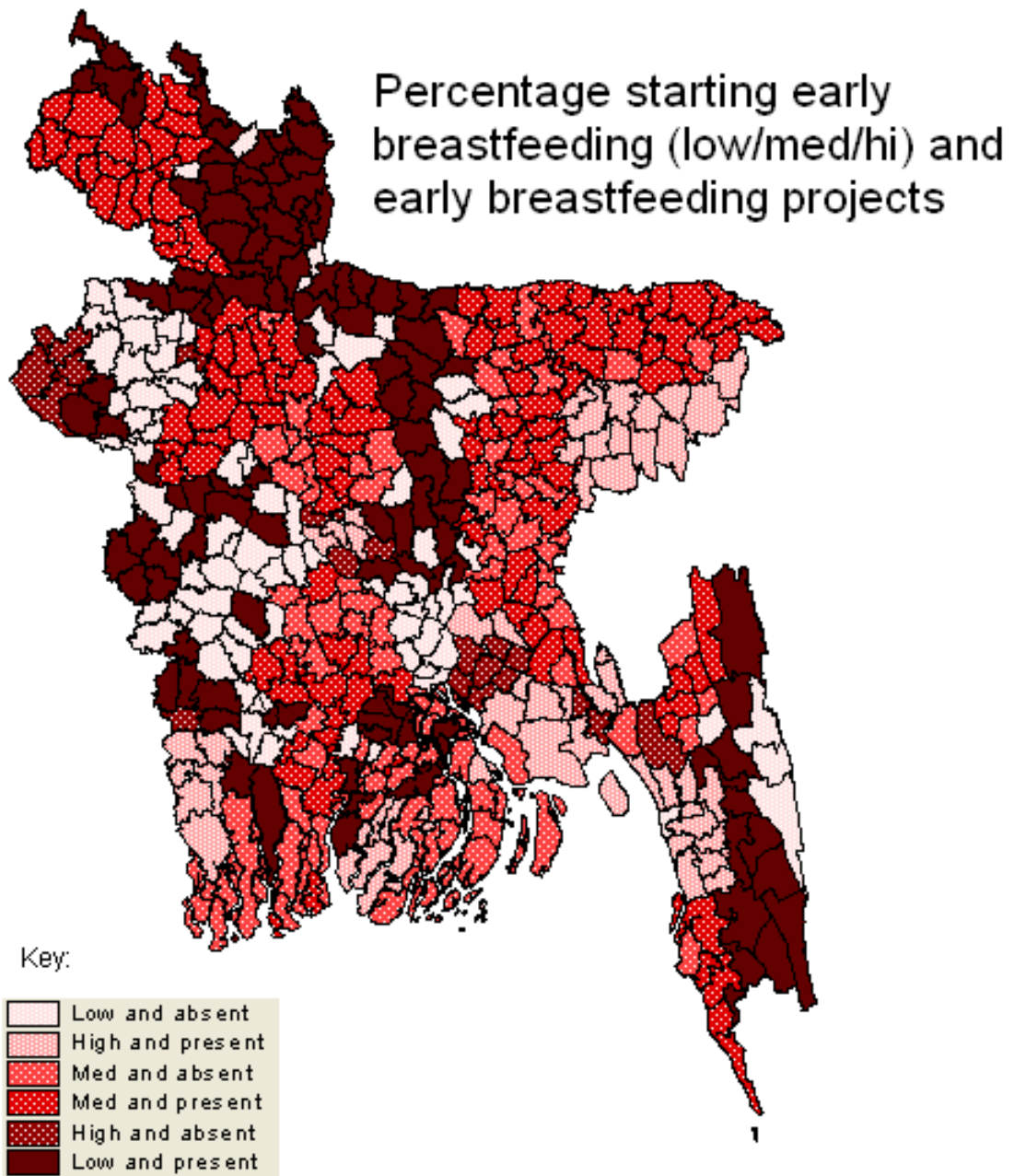
Cattle per household (low/med/hi) and presence of asset transfer projects



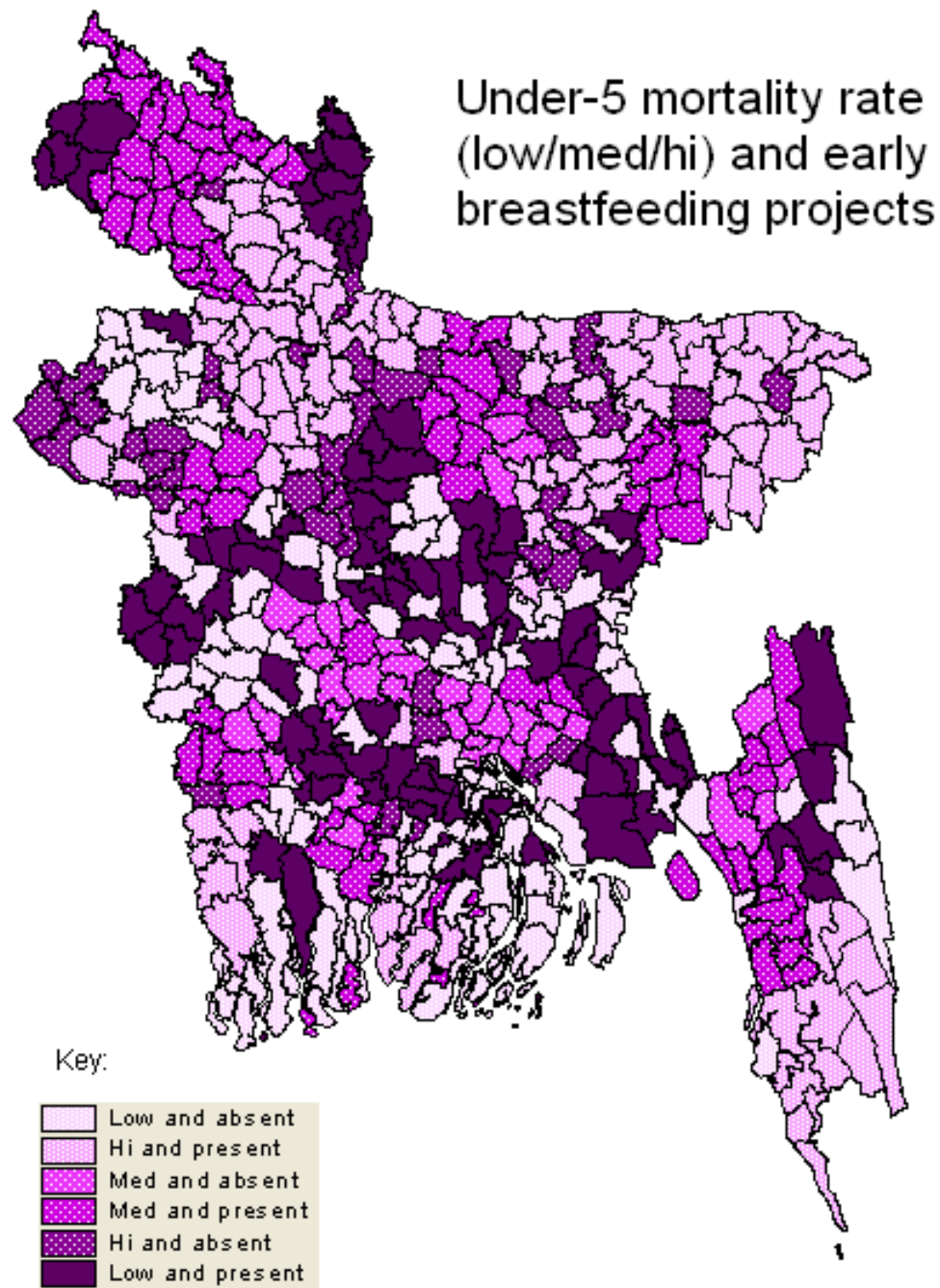
Key:

Lightest green	Low and absent
Light green with grid	High and present
Medium green with grid	Med and absent
Medium green with dots	Med and present
Dark green with dots	Hi and absent
Darkest green	Low and present

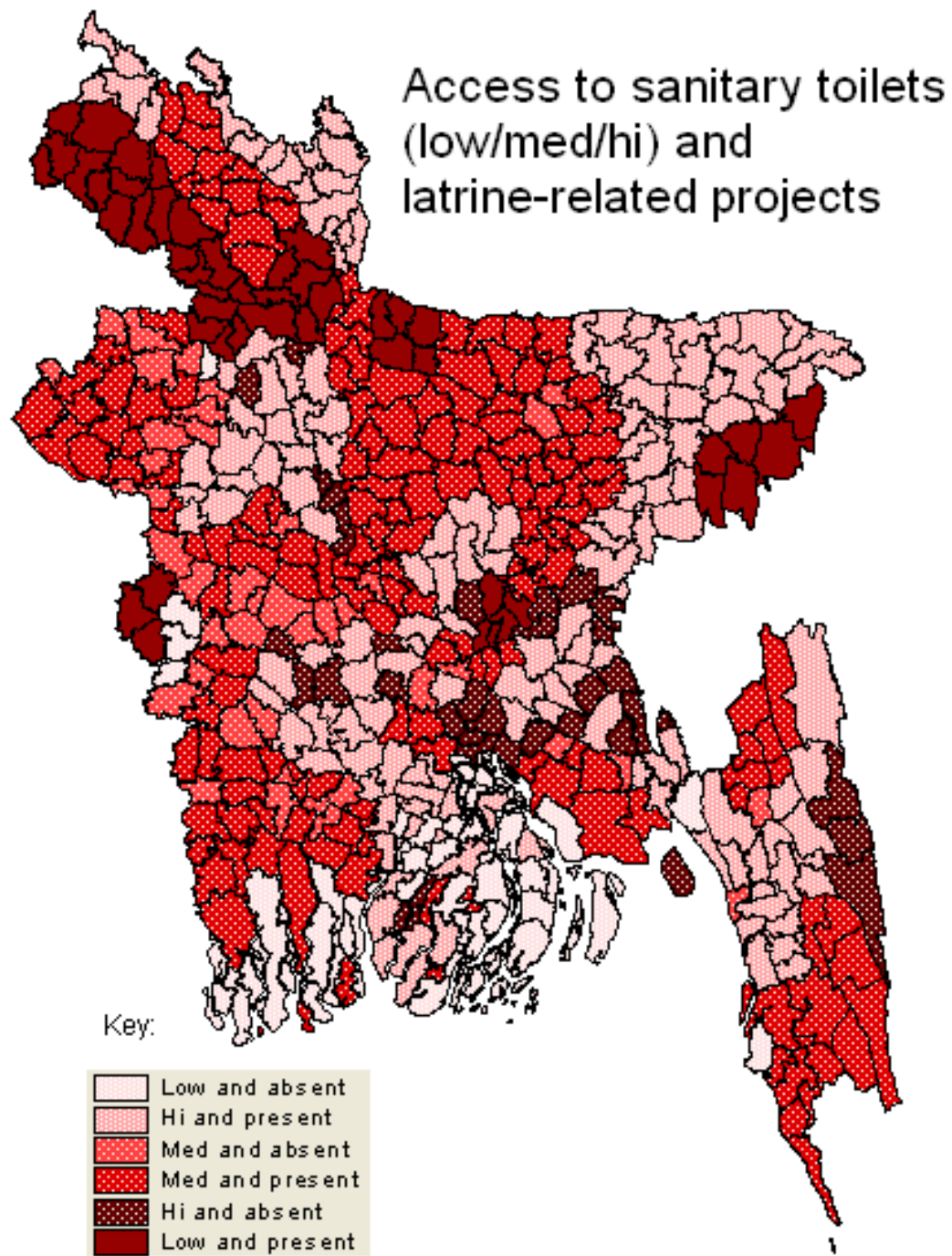
Map 9



Map 10

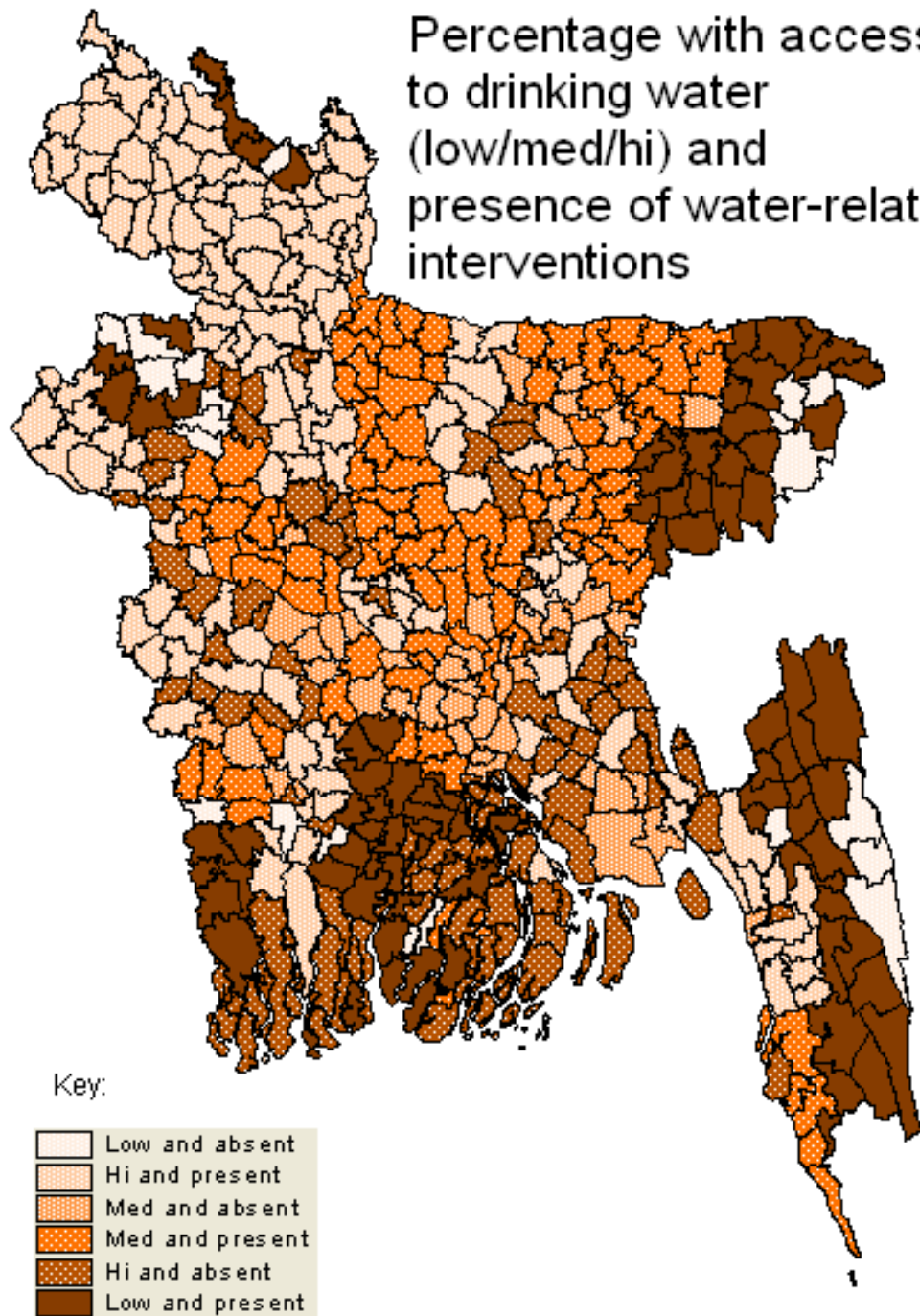


Map 11

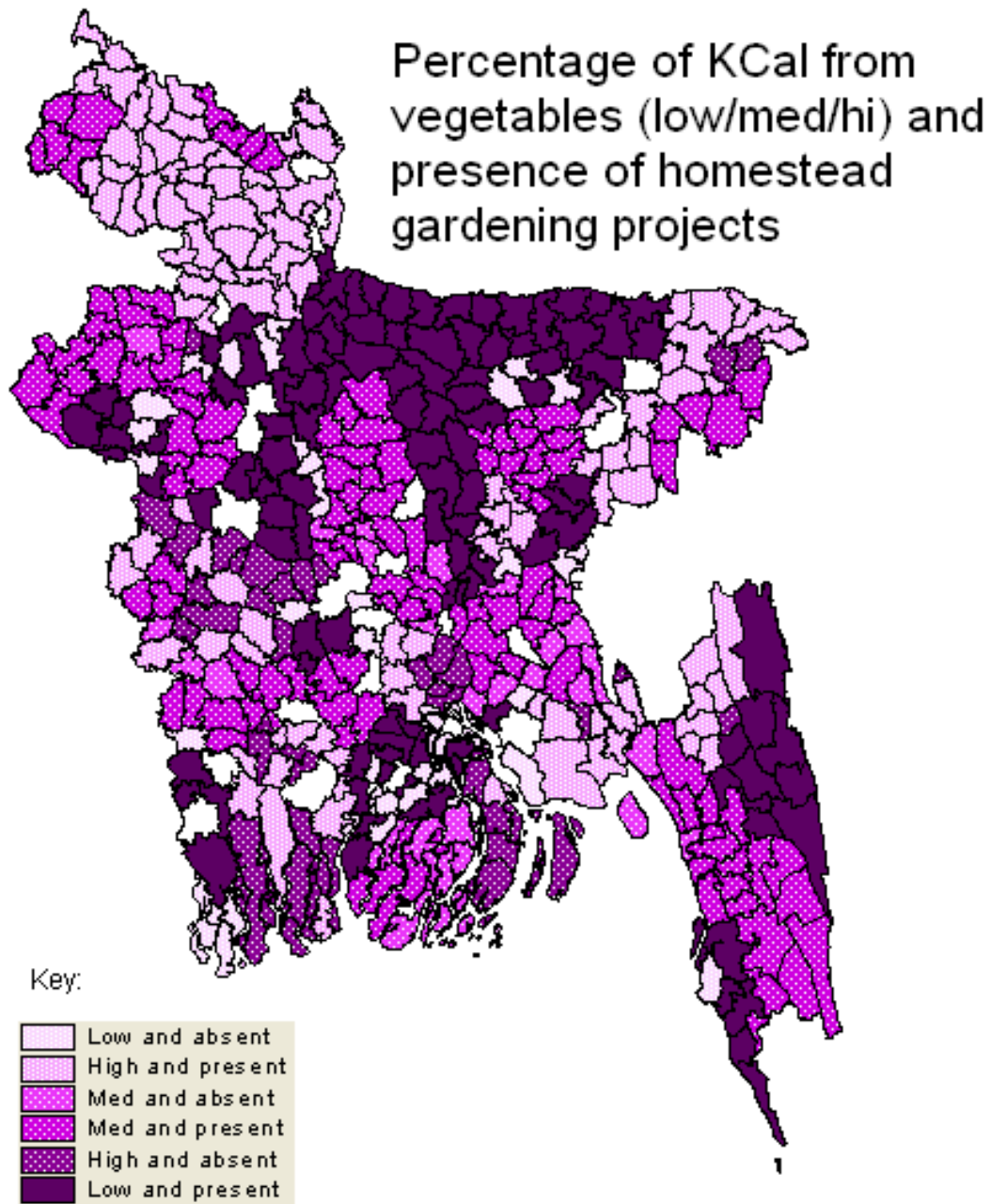


Map 12

Percentage with access to drinking water (low/med/hi) and presence of water-related interventions



Map 13



Map 14

Annex 5: Sources of Information and Potential Entry Points

