Chapter 7

THE WAY AHEAD

DHDRs and Decentralised Planning

As one of the most backward districts in the state of West Bengal, Uttar Dinajpur undoubtedly experiences severe impediments in the equalisation of the human capabilities represented by education, healthcare and livelihood access. While the foregoing chapters of the Uttar Dinajpur DHDR have provided a detailed report on these critical development constraints that exist today within the district, along with associated challenges in achieving gender equity and controlling high migration-induced rates of population growth, the logical purpose of preparing the DHDR can only be fully served if these prior findings are compressed synoptically into a set of consistent human development rankings that can be used to measure the level of current attainments and deprivations within the district. Within the structure of human development reports, as popularised by the UNDP, this task is accomplished intuitively through the formulation of simple ranking indexes that can be easily analysed and interpreted by the ordinary people of the district, as well as by other stakeholders who have a more direct role in deciding future planning priorities for the district. Thus, through human development indexing, the DHDRs can review the distribution of attainments and the fulfilment of people's entitlements across the district, while also identifying regions, population segments and livelihood sectors where these constraints are most severe.

By disaggregating the overall development attainments at district level and analysing these at subdistrict level for specific sectors and regions, the DHDRs essentially introduce a 'bottom up' approach towards the measurement of human development and are thus able to draw focus to pockets of persisting backwardness that exist in the district. By shifting their attention from aggregate levels of achievement to the disaggregated patterns of regional attainment, the DHDRs also measure the extent of development inequality within the district, and reveal directions for resource reallocation so that persisting human development gaps can be filled. Thus the DHDRs also assist in infusing a new sense of purposiveness into decentralised district planning by setting achievable timeframes, within which human development inequalities are to be removed. By offering a comprehensive report card to all stakeholders on the development processes and the overall development performance within the district, the DHDRs ultimately help in outlining a development vision for the district, thus providing a springboard for the achievement of social justice and regional equity.

The way forward for the district of Uttar Dinajpur, as defined in this concluding chapter of the Uttar Dinajpur DHDR, commences with two essential steps. The first step involves the synoptic capture of current human development situations that exist within the district through the formulation and formal analysis of human development indices for the different blocks that constitute the district. The second step involves a review of the critical human development constraints and processes described in the preceding chapters in the light of these indices, and the envisioning of a basic human development strategy that can be followed in future by the district planning authorities in Uttar Dinajpur. While these steps are merely the beginning, they create a valuable opportunity to review and recast development priorities, ultimately with the purpose of liberating the human development process in Uttar Dinajpur from its present constraints and opening the doorway for vibrant and inclusive growth that reaches out to all people residing in the district.

Indexing Human Development in Uttar Dinajpur

The indexing of human development in Uttar Dinajpur at block and district levels at the conclusion of the DHDR exercise fulfils several useful purposes. Since baseline information on the relative development

achievements of the nine CD blocks is generally inadequate, block indexing helps to identify pockets of persisting backwardness in the district, and also draws immediate attention to the nature of human development deprivations within each block as well as to the nature of specific interventions that need to be made, thus assisting the evolution of an overall development strategy for the District Plan. The indexing methodologies also bring special focus to bear on underlying spatial and agroclimatic attributes that compound human development deprivations in certain subregions. By identifying the sources of persisting human poverty and vulnerability among certain social sections, the indexes help in the formulation of appropriate poverty alleviation strategies designed to uplift vulnerable rural communities from the clutch of human development deprivation and poverty.

Nevertheless, several conceptual and methodological issues have to be resolved before satisfactory computations of the indices can be made. Since the analysis in the DHDR has to be made at subdistrict level using block-level data, the database support for the indexing exercise is poor and entails modification of the UNDP methodology for computing human development indices [HDIs]. Because the existing data sources are limited, insufficient information is available for the computation of human development dimension indices for urban areas and for the district as a whole, through direct application of the UNDP method. Such difficulties appear most strongly in the computation of income-based indices since no official estimates of per capita incomes are currently available at subdistrict level. Difficulties also arise during the computation of life expectancy based indices at subdistrict level, since estimates of infant mortality rates [IMRs] for subdistrict units are not available from SRS and the IMRs available from the ICDS system are often incomplete and unreliable.

Thus the indexing of human development in the DHDR depends on adaptation of the original UNDP approach to suit the databases currently available at block level. Such adaptations have also previously been made during HDI computation in national and state HDRs, because of similar database constraints. The *National HDR 2001* for India, thus, made significant departures from UNDP computation methods while calculating *longevity indices* based on weighted averages of *life expectancy at age 1 year and IMR*, instead of zero-age life expectancy as in the relevant UNDP index, and also while calculating indices for *educational attainment* based on weighted averages of 7 + *literacy rates* and the *intensity of school enrolments* at different educational stages, instead of *adult literacy* rates and *gross enrolment ratios [GERs]* in the UNDP computation. Again, the indices for *income attainment in NHDR 2001* departed significantly from UNDP computations based on *real per capita income*, by weighting *real per capita consumption expenditure* with adjustments for *income inequality* and *inflation* levels.

The HDI computations made in the *West Bengal Human Development Report [WBHDR] 2004*, again, made a methodological departure from the indexing methods used in *NHDR 2001* by returning to zero-age life expectancy to capture longevity and using a weighted average of *7* + *literacy rates* and *NSS school enrolment ratios* in the 6-14 age group instead of *adult literacy rates* and GERs. In the case of the WBHDR indices for income attainment, the departures made from the UNDP and NHDR formulations were even more radical, since these were based on an unweighted average of *DDP per capita*, NSS *monthly per capita expenditure [mpce]* and NSS estimates of the *population above the poverty line*.

The methodological problems that arise when computing sub-district level attainment indices for the DHDRs are even more severe, because of lack of direct estimates of per capita income and per capita expenditure at sub-district level, and the dearth of reliable estimates for IMR. The income attainment and health attainment indices of the UNDP thus have to be substituted by suitable surrogate indices that can be readily computed from the existing block level database. However, it may be recalled that the UNDP life expectancy, educational attainment and income attainment indices in themselves are surrogate measures for basic underlying human development dimensions of

- (i) leading a long and healthy life
- (ii) continuous acquisition of knowledge, and
- (iii) enhancing command over resources and material living standards

The lack of direct measures for income, health and knowledge attainments can thus be resolved by the use of alternative indirect measures of these human development dimensions, to yield consistent block-level estimates of HDI based on adaptations of the UNDP methodology.

Modified HD Indexing Procedures in the Uttar Dinajpur DHDR

While the *Bankura DHDR*, 2007 did not make any HDI computations, choosing instead to represent interblock variations in human development attributes pictorially as radar graphs, modified HDI computations were made in the *Malda DHDR*, 2007, with the limited objective of making internally consistent human development comparisons between the constituent blocks in Malda district. The indexing methodology used in the *Uttar Dinajpur DHDR* 2010 is identical to that earlier adopted in the Malda DHDR, and involves the initial computation of separate dimension indices that measure existing attainments in the 9 Uttar Dinajpur blocks in the spheres of education, healthcare and access to livelihoods. Through a simple averaging method, these are then combined to yield the corresponding HDIs for each block, which measure overall human development attainments in collective terms.

The computation for the education index is based on gross enrolment ratios [GERs] among the population segment aged between 5-14 years and 15 + adult literacy rates for each Uttar Dinajpur block, representing direct application of the UNDP methodology. Nevertheless, in the absence of regular annual headcounts, the baseline estimates for the block population falling within these two age-segments in 2006 were generated through forward projection of the corresponding 2001 population figures, using exponential growth trends shown by these two population segments during the intercensal period between 1991-2001. The projection has an officially representative character, since similar projected population figures are routinely used during the targeting of Government education and healthcare programmes at district and block level.

Modifications to the UNDP health and income indices were made, for reasons earlier outlined, while calculating block level healthcare and economic indices at for Uttar Dinajpur. The modifications involved surrogate computation of

- (a) a health services accessibility index in lieu of the UNDP life expectancy index, and
- (b) a livelihood opportunities index in lieu of the UNDP income attainment index

The health services accessibility index used in the Uttar Dinajpur DHDR is the unweighted average of separate sub-indices for

- (i) the proportion of the projected block population covered by rural sanitation schemes in 2006
- (ii) the proportion of the projected block population fully or partially covered by safe drinking water schemes in 2006
- (iii) the proportion of the target population in the age group 0-4 years covered by immunisation services under the Universal Immunisation Programme [UIP] in each block in 2006, where the immunisation target for each block is determined independently on the basis of blockwise estimates of live births, rather than following the more approximate expected level of achievement [ELA] methodology used while reporting immunisation achievements in Health Department documents, and

(iv) the estimated proportion of safe deliveries in the block in the year 2006, where safe deliveries were defined as the aggregated number of institutionalised deliveries and births assisted by trained birth attendants [TBAs]

This combination of health and hygiene indicators ensures the sensitivity of the health services accessibility index to underlying factors that also determine rural morbidity and mortality, thus closely approximating the block level rankings that would have been obtained if, following the UNDP method, a zero-age life expectancy index had been computed from IMR. The need for computing immunisation coverage indirectly from block estimates of live births arises because the ELA-based indicators for immunisation achievement commonly tend to be based on underestimates of the actual number of live births in the district. Hence the modified methodology was deemed more appropriate in estimating health service accessibility in the Uttar Dinajpur blocks.

The *livelihood opportunities* index used in the DHDR is based on work participation patterns among the Uttar Dinajpur population, for which information is readily available at block level from the Census database. However, since these data are not updatable till the next Census, the computation of the index is done for the census year 2001, unlike the other HD attainment indices where the computations refer to the year 2006. The other practical limitation of this indexing method, in comparison to standard income based indices, lies in its inability to draw in monetary data such as prevailing wage-rates which would help in the valuation of work, rather than merely measuring the extent of its availability. Several conceptual obstacles nevertheless stand in the way of including monetary data in the computation of the index. While standardised data on wage rates are not consistently available at block level, a block is also probably too large a unit for the wage-levels within it to be captured by a single average wage rate. Also, because of wideranging differentials between the wages admissible for various categories and classes of work, a single average wage would be incapable of capturing earning differentials within different segments of the block population. Hence, the livelihood opportunities index used in the computations for the Uttar Dinajpur DHDR depends exclusively on work participation information drawn from Census sources.

Various dimensions of work participation are included in the computation of the index. While Census work participation rates [WPRs] or the ratio of total workers in the block to the 2001 block population give some indication of the size of the block workforce and hence of the extent to which work opportunities are available to the block population, the ratio of main workers who are able to secure more than 180 days of work in a year to total workers in the block is a measure of the quality of available work opportunities. Collective earnings among main workers would in any case exceed the combined earnings of an equivalent number of marginal workers in the course of the year. Hence, blocks that are able to provide more opportunities for main work to their working population would experience higher income attainments compared to other blocks in the district. A third work participation attribute included within the livelihood opportunities index, utilising the four-fold occupational classification available for Census 2001 data, is the ratio of 'other' workers to main workers, which measures the diversification of work opportunities within a block. The other worker category within this classification excludes the proportion of workers in the block that derive their livelihoods from traditional agricultural and artisanal home-based activities. Thus, the ratio of other workers to main workers reflects the extent to which opportunities for non-traditional offfarm based livelihoods have proliferated within the block, indicating expansion of the economic base of the block. The Uttar Dinajpur blocks that are able to provide highly diversified work opportunities outside agriculture would also be capable of expanding the incomes of the block population by drawing more and more rural workers into new activities outside traditional agriculture. The livelihood index used in the DHDR is then computed as the simple average of these three basic work participation attributes.

The modified human development index used in block-wise human development computations for the Uttar Dinajpur DHDR is then expressed as an equiweighted average of the three dimension indices listed above. Human development differentials between blocks can thus arise because of underlying variations in block level education, healthcare and livelihood attainments, in any possible combination. The results of the modified HDI computations for Uttar Dinajpur are presented in the series of tables and charts below, which rank the 9 CD blocks against each other in terms of their indexed human development attainments. HD dimension indices and HDIs have only been calculated for the rural population in the district, since databases containing the same set of development variables are not available at present for the four statutory towns in the district. Since population growth in Uttar Dinajpur in recent times has been heavily influenced by migration, other conceptual difficulties also arise in making forward projections of the population in individual urban areas, as required by some of the component indices. While rural-to-rural migration generally follows a longterm trend, rural-to-urban migration can be quite spasmodic and unpredictable. Nevertheless, since urbanisation levels in the district are still very limited and the rural areas account for nearly 78 percent of the Uttar Dinajpur population, the block indices are highly representative of the overall human development situation in the district and of the level of human development deprivation experienced in each particular block. As such, these HD indices can provide adequate direction to future human development planning exercises in Uttar Dinajpur by indicating the direction in which the planning interventions can be refocused.

In line with the procedure earlier adopted in the *Malda DHDR 2007*, separate computations have also been made for block level *human poverty indices* [HPIs]. Because of the frictions and fluxes generated by the development process, not all residents in a block are able to leverage human development opportunities equally, experiencing relative deprivation as a result. The HPI is an inversely-weighted index that seeks to capture the extent of poverty-inducing deprivations among vulnerable sections within each CD block. Especially vulnerable among rural segments within block population, for instance, are marginal cultivators who have lost land and become landless labourers as a consequence, households and communities who experience differential social barriers in their access to livelihoods and education, women-headed households, households headed by old and infirm members and other households with a large proportion of marginal workers whose earnings are subject to periodic uncertainty, and so on. In each such instance, the rural households under consideration suffer additional deprivation relative to their peers. Thus while the block HDI coefficients represent the extent of human development achievements made by each block in Uttar Dinajpur, the HPI coefficients identify the corresponding patterns of relative deprivation that may exist in each CD block. Human development interventions in the district need to be made after analysis of both coefficients.

Current Educational Attainments in Uttar Dinajpur

The education index calculation for the Uttar Dinajpur blocks was based on forward projection of the block-level population count from the 2001 Census uptil the year 2006, using the annual exponential growth rates for the population of each block populations, Block-wise primary and upper primary enrolment figures for 2006 were drawn from the DISE database. The size of the 5-14 age cohort, from which learners are drawn at primary and upper primary stage, was estimated for each block from age-group data for the Uttar Dinajpur population. The broad estimates thus generated were smoothed by forward projection of the 0-5 age cohorts from the 1991 and 2001 Censuses, since all infants in that age-group in 2001 would be in the school-going age in 2006, while infants in the 0-5 age-group in 1991 would all have left the primary school-going age cohort in 2006. No data adjustments were made for internal migration of students within the district, since children leaving their birth region to attend upper primary schools located elsewhere

were specified as being residents in the blocks where they were currently enrolled. The Gross Enrolment Ratio [GER], i.e. the proportion of the population of school-going age that is currently enrolled at schools, was estimated for each Uttar Dinajpur block.

Literacy rates among the 15+ age-group in each block were estimated by projecting the literacy trends for 1991-2001 and the baseline population of this COHOLT. The number of literates in this age-segment was estimated by subtracting the number of school-going literates in the 5-14 age-group from the projected figure for total literates in each block in 2006. Educational attainment indices were then computed for each block estimated as a weighted average of GERs and 15+ literacy rates, with two-third weight assigned to literacy and one-third weight to GER. The results of this computation are tabulated below for the 9 constituent blocks and the aggregate rural population of Uttar Dinajpur district.

While Hemtabad and Kaliaganj blocks ranked first and second in terms of overall educational attainments, doing well in terms of both GERs as well as 15+ literacy, Goalpokhar-1, Goalpokhar-2 and Karandighi occupied the three lowest positions respectively, primarily because of their lower literacy achievement. Since Goalpokhar-1 was an exceptionally poor performer in both GER and 15+ adult literacy, low literacy levels were likely to be perpetuated in this block in the future. In the other Uttar Dinajpur blocks, GERs tended to cluster closer together, indicating that a future educational transformation can be foreseen in these blocks. Chopra in particular was a notably strong performer in terms of school enrolments, in spite of having adult literacy achievements that were on the low side. Nevertheless, in terms of their overall education index, the Islampur SD blocks collectively trailed behind the Raiganj SD blocks, once again demonstrating the high degree of educational inequality that separates the two sub-divisions of Uttar Dinajpur.

Table: Education Index Computations for Uttar Dinajpur DHDR, 2010

CD Blocks	2001 Population	2006 Projected 15y + Population	2001 7y + % Literacy	2006 Projected 15y + % Literacy	2006 Projected 5-14y Population	2006 Total P/UP Enrolment [DISE]	2006 Gross Enrolment Ratio [GER]	Combined Education Index	Education Index Rank
Chopra	223022	156049	43.3	31.7	66800	55146	0.83	0.486	5
Islampur	241951	169294	38.4	31.9	72469	48822	0.67	0.438	6
Goalpokhar-1	245430	176904	31.6	29.2	75727	36190	0.48	0.354	9
Goalpokhar-2	226472	162766	34.1	30.1	69675	43873	0.63	0.411	8
Karandighi	304986	218471	36.0	34.6	93520	50663	0.54	0.411	7
Raiganj	347108	250175	50.3	49.5	107092	68030	0.64	0.542	3
Hemtabad	118822	85921	56.7	51.8	36780	26615	0.72	0.586	1
Kaliaganj	190019	136393	54.1	52.4	58385	39877	0.68	0.577	2
Itahar	249541	178526	47.4	46.4	76421	47177	0.62	0.515	4
U Dinajpur Rural	2147351	1534499	42.9	39.0	656870	416393	0.63	0.471	

Source: Lead Authors' computations for Uttar Dinajpur DHDR, 2010

Certain positive indications are also revealed by the education index computations. With the exception of Goalpokhar-1 and Karandighi, where school enrolments still lag behind the education attainments of the rest of the district, the other Islampur SD blocks all show improvement in enrolment levels despite having low 15+ literacy achievement. Educational backwardness in Uttar Dinajpur can thus be said to be an

inheritance from the past, in the form of persisting illiteracy among adult residents. Chopra has made a remarkable turnaround in breaking this crux, achieving very high GER in spite of low initial literacy. Thus the low levels of education attainment in the Islampur SD blocks largely reflect educational backwardness within their adult populations, which is likely to be reversed with time if school enrolments substantially improve. The unenviable position of Uttar Dinajpur as the least literate district in West Bengal is primarily because of these low education attainments among the population of the Islampur SD blocks, among which Goalpokhar-1 appears likely to perpetuate its position as the least literate block in Uttar Dinajpur because of its abysmally low attainments in both GER as well as adult literacy. Evidence that this position can be improved upon in the future emerges in the case of adjacent Goalpokhar-2 and Chopra. Although adult literacy here is almost at par with the low level seen in Goalpokhar-1, the GERs in these blocks stand clearly ahead. The implication is that families with illiterate parents here are now being increasingly persuaded that the key to a better future lies in improving the access of their children to formal education.

However, a more dire portent also present within the education index computations for all Uttar Dinajpur blocks relates to the longterm implications of the present rural GERs. Currently, less than two-thirds of the children in the 5-15 age-group who should be attending school are enrolled at primary and upper primary schools in the district. Under the target of universalising education which seeks to raise GERs within this age-group to 100 percent in a phased manner in the next few years, a sizeable number of out-of-school children still have to be inducted into the formal and nonformal school system in the district. Since enrolments and pupil-teacher ratios are already high in most Uttar Dinajpur blocks, this cannot be accomplished without substantial expansion within the education system across the entire district. Without this policy commitment, the universalisation target cannot realistically be met in Uttar Dinajpur, and the district will see the perpetuation of its legacy of high adult illiteracy for a long time to come.

The urgency of the educational situation in Uttar Dinajpur district becomes readily apparent. At present, there are a mixture of positive and adverse signals, indicating that education has become a key area for human development intervention in the district. The key interventions will have to be made particularly in the Islampur SD blocks, where there are significant educational deficiencies, both in terms of the dearth of educational institutions and in the number of teachers. The key educational interventions will also need to be planned holistically, so that children entering the primary education system are provided adequate avenues for further educational advancement through the establishment of an adequate number of upper primary and secondary schools and colleges. Without substantial augmentation of the educational infrastructure across the district, both in terms of the dispersal of teaching staff and the dispersal of institutions, a large proportion of the rural population will continue to remain deprived of adequate educational opportunities and knowledge inputs. In view of the urgency of this problem, a re-prioritisation will have to take place within the district which places the educational needs of the isolated Islampur SD blocks above the needs of other more advantageously situated blocks, till these educational imbalances are rectified. Given their border locations and their difficulties of communication, villages in the subdivision will need focused attention if the current problems which result in Uttar Dinajpur being the least literate district in West Bengal are to be rectified equitably.

Current Health Attainments in Uttar Dinajpur

While the educational attainment index discussed above applied the UNDP method of computation, the health attainment index calculation for the Uttar Dinajpur DHDR employs the proximate method developed for the calculation of block level health indices in the Malda DHDR 2007, because of the unreliability of direct IMR estimates available in the district. Accordingly, the assessment of current healthcare situations in the Uttar Dinajpur blocks is based on surrogate indicators that are sensitive to the quality and coverage

of the basic health services that are accessible to the block populations, namely the coverage of the population by rural sanitation and safe drinking water schemes, the coverage extended by neonatal immunisation schemes, and the incidence of safe deliveries in each Uttar Dinajpur block. These represent a definitive set of general health & hygiene services and maternal & child health [MCH] interventions which also contribute in the long run to the reduction of IMR and improvement of life expectancy in the district, as targeted during computations of the UNDP health attainment index. The health sub-indicators used in measurement of the surrogate health services accessibility index are listed below, with the attainment levels achieved by the nine Uttar Dinajpur blocks. The database on which these are developed includes data from the Uttar Dinajpur Zilla Parishad on current block-coverage under the Total Sanitation Programme [TSP] and Swajaldhara scheme, and data from the Uttar Dinajpur District Health Information System [DHIS] located at the office of the Chief Medical Officer of Health [CMoH] on block-wise coverage of children in the 0-4 age-group under the Universal Immunisation Programme [UIP] and on the incidence of safe deliveries that occur under the supervision of hospitals and trained birth attendants [TBAs] in each block. However, the population figures for the measurement of health and sanitation targets and for the overall number of births to be targeted by universal immunisation schemes and safe delivery are projected forward to the target-year 2006. As explained earlier, the ELA methods used for estimating MCH and immunisation targets are discarded since these provide inaccurate estimates of the number of live births, which are also inconsistent with the intercensal growth rates experienced by the Uttar Dinajpur population. Instead, a more direct estimate of the number of live births that have actually occurred is made from the exponential projection of intercensal growth rates for the block population. These are then used for the measurement of block-wise attainments under the immunisation and MCH programmes, from which the composite health accessibility index is developed by averaging these with safe drinking water and rural sanitation coverage.

As seen in the table for the four sub-indicators of health attainments, rural sanitation coverage under TSP is low in most Uttar Dinajpur blocks. Since TSP includes a subsidy element extended to BPL households, the figures for TSP coverage largely reflect the degree of response among rural BPL households to this incentive. Since rural APL households are expected to bear the full costs of acquiring and installing sanitation facilities purchased from the sanitary marts, the response to TSP among them has been poor in most parts of rural West Bengal and India, accounting for the low rural sanitation coverage visible in the Uttar Dinajpur blocks. On the other hand, the Swajaldhara norm defines a rural habitation as being fully covered by the scheme if a protected water source is accessible to a maximum of 250 persons within an access radius of 1.6 km from their households. On this count, many Uttar Dinajpur blocks now report full coverage under the Swajaldhara norm, even though this does not in itself guarantee that all rural residents would access safe potable water from these installations if other unprotected water sources are available to them within a closer access radius. Since the Dinajpur region has an ancient tradition of utilising water from manmade tanks, over 29,000 of which are scattered across Uttar and Dakshin Dinajpur districts, effective access and use of safe drinking water requires a change in the mindset and the behavioural patterns of the people.

Immunisation coverage is uniformly high in most parts of the district, and the block attainments for immunisation are clustered relatively closely around the average immunisation attainment for the whole district. Indicators for the incidence of safe deliveries are much lower on the whole, and also show wider variability between the Uttar Dinajpur. Since the ultimate target for all health & hygiene schemes is to achieve complete coverage, the present levels of coverage under rural sanitation and MCH schemes in the Uttar Dinajpur blocks are well short of the ultimate scheme targets. Nearly half of the deliveries that take place in the district occur in unsafe conditions, and approximately one in every six infants still does not receive adequate healthcare protection from Government immunisation schemes.

Table: Health Sub-Index Computations for Uttar Dinajpur DHDR, 2010

Blocks	2001 Population	2006 Projected Population	2006 Population covered by Sanitation Schemes	Sanitation Sub-Index	2006 Population covered by D/W Schemes	Safe Drinking Water Sub-Index
Chopra	223022	258722	49035	0.19	258722	1.00
Islampur	241951	276633	37443	0.14	276633	1.00
Goalpokhar-1	245430	276011	56318	0.20	276011	1.00
Goalpokhar-2	226472	262627	25797	0.10	262627	1.00
Karandighi	304986	359528	31647	0.09	353546	0.98
Raiganj	347108	394341	58270	0.15	393295	1.00
Hemtabad	118822	132778	75873	0.57	130796	0.99
Kaliaganj	190019	213786	38438	0.18	213786	1.00
Itahar	249541	285140	73358	0.26	283300	0.99
U Dinajpur Rural	2147351	2458598	455516	0.19	2449383	1.00
CD Blocks	2006 Estimated Live Births	2006 Estimated Target for Immuni- sations	2006 BCG/OP V/DPT /Measles Immuni- sations	Immunisation Sub-Index	2006 Attended Deliveries	Safe Delivery Sub-Index
Chopra	9293	37173	33479	0.90	6175	0.66
Islampur	9950	39802	31479	0.79	4966	0.50
Goalpokhar-1	9624	38498	35527	0.92	4399	0.46
Goalpokhar-2	9063	36253	27560	0.76	4240	0.47
Karandighi	12601	50406	42704	0.85	6832	0.54
Raiganj	11945	47778	38316	0.80	5806	0.49
Hemtabad	3947	15790	11704	0.74	2519	0.64
Hemtabad Kaliaganj	3947 6110	15790 24440	11704 21298	0.74 0.87	2519 5579	0.64

Source: Lead Authors' computations for Uttar Dinajpur DHDR, 2010

The health attainment index for the Uttar Dinajpur DHDR is computed as an equiweighted average of the four sub-indicators. Kaliaganj block with its relatively low population pressure and its direct access to a State General hospital [SGH] facility emerges at the head of the block rankings, with higher immunisation coverage and better access to safe delivery services playing a primary role in this achievement. Hemtabad emerges as the second-ranked block in terms of health service access because of similar factors, as well as its better sanitation coverage since it has a relatively high concentration of BPL families. At the opposite end of the scale, Goalpokhar-2 and Islampur perform poorly, primarily because of their large population loads and lower access to immunisation and safe delivery services.

Table: Health Services Index Computations for Uttar Dinajpur DHDR, 2010

CD Blocks	Sanitation Sub-Index	Safe Drinking Water Sub-Index	Immuni sation Sub-Index	Safe Delivery Sub-Index	Combined Health Services Index	Health Index Rank
Chopra	0.19	1.00	0.90	0.66	0.689	3
Islampur	0.14	1.00	0.79	0.50	0.606	8
Goalpokhar-1	0.20	1.00	0.92	0.46	0.646	5
Goalpokhar-2	0.10	1.00	0.76	0.47	0.582	9
Karandighi	0.09	0.98	0.85	0.54	0.615	6
Raiganj	0.15	1.00	0.80	0.49	0.608	7
Hemtabad	0.57	0.99	0.74	0.64	0.734	2
Kaliaganj	0.18	1.00	0.87	0.91	0.741	1
Itahar	0.26	0.99	0.88	0.56	0.672	4
U Dinajpur Rural	0.19	1.00	0.84	0.56	0.645	

Source: Lead Authors' computations for Uttar Dinajpur DHDR, 2010

However, unlike educational attainments in Uttar Dinajpur, these variations in healthcare coverage within the district cannot be identified closely either with the Raiganj SD blocks or the blocks under Islampur SD. Chopra and Goalpokhar-1 blocks in Islampur SD do better than Karandighi, Islampur and Goalpokhar-2 and are thus ranked in the third and fifth position in terms of overall health service accessibility, while Islampur and Goalpokhar-2 are pushed to the very base of the accessibility scale. On the other hand, while Kaliaganj and Hemtabad do well within Raiganj SD, the headquarters block of Raiganj Sadar performs surprisingly poorly in terms of health attainments and thus ranks seventh overall within the district, positioned just above Islampur and Goalpokhar. As the associated health sub-indicators reveal, Raiganj Sadar block has particularly low rates of sanitation coverage, followed closely by Itahar. Despite the proximity of the District Hospital [DH] at the headquarters city of Raiganj, access to safe deliveries is also limited within the block, chiefly because of the inadequate DH infrastructure relative to the high population load in the block. Since the block-wise health attainment rankings in Uttar Dinajpur are highly correlated with the extent to which safe delivery and sanitation services are accessible to the rural population, these emerge as key healthcare areas where positive interventions are needed within the district. Although immunisation coverage also needs to be improved substantially in the district to reduce IMR and improve rural child health situations, the gravity of this problems tends to be masked by the reliance on inaccurate ELA based targeting for UIP immunisation services. ELA can only work satisfactorily if the recording of life births in the district is complete and comprehensive. In the absence of statutory mechanisms for enforcing this, coupled with existing weaknesses in the ICDS and SHC health service delivery systems, as well as glaring shortages in SHC staffing in terms of male health assistants who have an independent role in expanding the outreach of the referral healthcare, birth recording and childcare is likely to remain weak in the rural areas of Uttar Dinajpur, leading in turn to overestimation of immunisation coverage and underestimation of IMRs, unless these deficiencies are speedily addressed.

Current Economic & Livelihood Attainments in Uttar Dinajpur

The index for economic achievement in the Uttar Dinajpur blocks is devised around the highly acceptable premise that income attainments among the block population are opportunity based, and can therefore be made visible through close examination of the work participation patterns of the population concerned. While work participation rates [WPRs] define the size of the economically active population in each block, the ratio of main workers to total workers increases the sensitivity of the index to the quality of livelihood opportunities and thus to the duration of work engagements. The ratio of other workers to main workers is sensitive to the extent to which livelihood opportunities have diversified outside traditional agriculture in Uttar Dinajpur, which by long tradition has been a predominantly agricultural district. The livelihood opportunities index in the table is the unweighted average of these three work participation attributes.

Table: Livelihood Opportunities Index Computations for Uttar Dinajpur DHDR, 2010

CD Block	2001 Population	2001 Total Workers	2001 % WPR	2001 % Main Workers to Total Workers	2001 % Other Workers to Main Workers	Livelihood Opportunities Index	Livelihood Index Rank
Chopra	223022	70122	31.4	86.1	50.8	0.561	1
Islampur	241951	79250	32.8	82.3	27.9	0.477	4
Goalpokhar-1	245430	108482	44.2	71.9	19.4	0.452	7
Goalpokhar-2	226472	75330	33.3	77.1	20.5	0.436	9
Karandighi	304986	124147	40.7	73.0	33.7	0.492	2
Raiganj	347108	144452	41.6	77.3	28.2	0.491	3
Hemtabad	118822	48049	40.4	72.9	22.7	0.454	6
Kaliaganj	190019	86153	45.3	74.9	19.7	0.467	5
Itahar	249541	115773	46.4	65.4	23.3	0.450	8
Uttar Dinajpur Rural	2147351	851758	39.7	75.1	27.6	0.474	

Source: Lead Authors' computations for Uttar Dinajpur DHDR, 2010

Agriculture is still the principal source of livelihoods for the population of Uttar Dinajpur, even though the size of landholdings is generally small and the extent of landlessness is high. In line with the recent experience in many other districts across West Bengal, substantial declines in the absolute number of cultivators have occurred in most Uttar Dinajpur blocks, with the exception of Kaliaganj and Itahar, in the former of which the increase in the number of cultivators has been substantial. Meanwhile, because of exceptionally high growth of population over the past few decades, livelihood pressures have intensified considerably. The general dearth of work opportunities outside agriculture are reflected therefore in sharp increases in the number of agricultural labourers through most of the district, except for Chopra and Goalpokhar-1 where the increase has been small, either because of agricultural stagnation (Goalpokhar-1) or because of the switchover from farming to plantation agriculture (Chopra). Gradual intensification of regional agriculture through widespread induction of irrigation and improved agricultural technology has permitted the main rice-growing blocks that spread northwards across Raiganj SD into Karandighi, Goalpokhar-2 and Islampur to absorb sizeable proportions of agricultural labourers in main work because of increased cropping intensity coupled with the highly labour-intensive nature of paddy cultivation. There have nevertheless been largescale

increases in the number of marginal workers in the continuous belt stretching from Itahar through Raiganj to Karandighi, where agricultural saturation is already very high. While in Hemtabad and Kaliaganj, the increase in marginal workers has been of a lesser order, because of lower population pressure overall, the other blocks in Islampur SD have all experienced growing outmigration of rural workers because of the inability of rural livelihood opportunities to grow apace with population numbers.

These combined trends are clearly visible in the variation in WPRs between the Uttar Dinajpur blocks. Chopra, Islampur and Goalpokhar-2 all have large block populations, but report substantially lower work participation than the rest of Uttar Dinajpur. Kaliaganj and Itahar, which grow immense quantities of rice, report much higher WPRs than the remainder of the district. Karandighi and Raiganj both have high population concentration but report WPRs exceeding 40 percent. While the proportion of workers who have been able to secure main work opportunities is generally high in all Uttar Dinajpur blocks, because of the dominance of agriculture, Chopra and Islampur offer considerably higher opportunities for main work participation, so that the numbers of marginal workers in these blocks is much lower compared to the rest of Uttar Dinajpur. Experiencing the highest livelihood pressures, Itahar stands at the other extreme, with over a third of its workforce engaging in marginal work. Along with Chopra and Islampur, Karandighi and Raiganj offer more diversification in non-farm work opportunities. While in Chopra, the main reason behind this lies in the rapid spread of bought-leaf tea factories and associated small tea plantations, livelihood diversification in Raiganj, Islampur and Karandighi is also affected by regional urbanisation trends around the municipal towns located within them, and by the proliferation of beedi manufacturing activities in Karandighi. Kaliagani, Goalpokhar-1 and Goalpokhar-2 stand at the opposite extreme, so far with little visible diversification away from agriculture. In Kaliaganj, this does not pose an immediate problem because of its lower relative population and because of its highly productive rice-based farming economy. On the other hand, in the two Goalpokhar blocks, the livelihood situations border on desperation, accounting for poverty and high seasonal outmigration from these two blocks. In Itahar, the livelihood situation is similarly desperate because of the sizeable density of the rural population, and high work participation and greater diversification to non-farm livelihood activities is unable to relieve these pressures.

Block rankings for the combined livelihood opportunities index closely follow these distributive patterns. Chopra stands first in terms of economic attainments, because of the combination of greater main work participation and higher rates of diversification to non-farm activities. The marked contrast between its livelihood index value of 0.561, against index values for the other Uttar Dinajpur blocks as well as the index for rural Uttar Dinajpur as a whole, show that it is well and truly ahead of the rest of the district in terms of livelihood opportunities. The clustering of livelihood index values in the other blocks within the relatively narrow range of 0.436-0.492 shows that the principal economic constraints that operate within the district today are the high degree of landlessness, the small sizes of most farming operations, coupled with the overwhelming pressure on agriculture for livelihoods Since the distributive pattern in livelihood indices across the Uttar Dinajpur blocks is closely correlated with the degree of diversification in livelihood activities, clear indication is obtained that the economic future of the rural residents of Uttar Dinajpur will depend strongly on the ability of the district to create viable livelihoods outside agriculture, through modern knowledge inputs that impart new skills to the district population and enhance its earning capabilities.

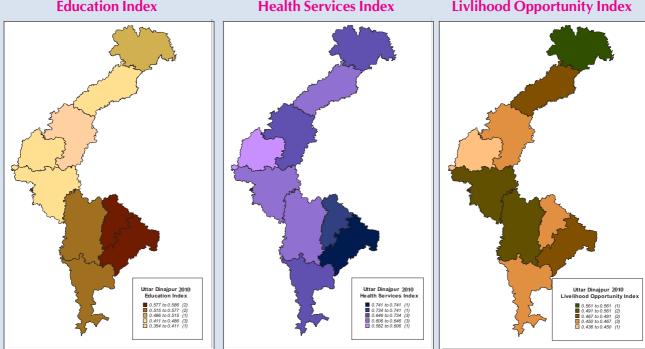
Overall Human Development in Uttar Dinajpur

The broad regional distributions of education, healthcare and livelihood attainments are summarised visually in the three dimension index maps. Regional disparities between the Raiganj SD and Islampur SD blocks are strongest in the case of educational attainments, with all blocks in Islampur SD being educationally deprived in comparison to Raiganj SD. Healthcare disparities are distributed more unevenly between the

two sub-divisions, with the populous blocks of Raiganj, Karandighi and Islampur faring poorly compared to most other Uttar Dinajpur blocks. Goalpokhar-2, which ranks lowest in terms of health service accessibility, forms a separate category by its own, suffering serious deficits in access to sanitation and safe deliveries besides lagging behind substantially in immunisation coverage. Except in Chopra, which stands apart from the other Uttar Dinajpur blocks in terms of the new access it offers to livelihood opportunities outside the agricultural sector, block-level livelihood differentials within Uttar Dinajpur are not as wide as those seen in the case of education and health attainments. The extent of livelihood pressure and work participation in the blocks is driven by population growth and migration. Nevertheless, although relative differences are small, the continuous cluster of blocks from Itahar to Karandighi offers relatively better livelihood access because of regional contiguity. While Kaliaganj and Islampur follow in sequence in the development periphery, the other Uttar Dinajpur blocks show up as definite gap areas in the provision of equitable livelihood opportunities. Among them, Goalpokhar-2 shows significant levels of deprivation in all three human development dimensions. It is thus identified as the subregion of Uttar Dinajpur where the human development situation is most critical.

MAP: Spatial Comparison of Human Development Dimensions across Uttar Dinajpur

Education Index Health Services Index Livlihood Opportunity Index



The existence of such livelihood gaps within the economic landscape of Uttar Dinajpur also offers strong evidence of persisting lack of integration within the district economy. This originates partially from spatial factors such as the peculiarly elongated shape of the district, the history of its administrative constitution and the configurations of marketing and transportation networks which still tie the local economy of the Islampur region to neighbouring parts of Bihar. Livelihood development within the Goalpokhar cluster is currently affected by its proximity to the city of Kishanganj, to which this cluster has traditionally served as a feeder region. However, rapid economic development around the new municipality of Dalkola can probably correct this regional imbalance within the foreseeable future, if proper communications policies and assembly market planning are included in an integrated perspective for the development of Dalkola as a new urban complex within Uttar Dinajpur.

Table: Modified Human Development Index [HDI] Computations for Uttar Dinajpur DHDR, 2010

CD Blocks	Combined Education Index	Combined Health Services Index	Livelihood Opportunity Index	Human Development Index [HDI]	HDI Rank
Kaliaganj	0.577	0.741	0.467	0.595	1
Hemtabad	0.586	0.734	0.454	0.591	2
Chopra	0.486	0.689	0.561	0.579	3
Raiganj	0.542	0.608	0.491	0.547	4
Itahar	0.515	0.672	0.450	0.546	5
Islampur	0.438	0.606	0.477	0.507	6
Karandighi	0.411	0.615	0.492	0.506	7
Goalpokhar-1	0.354	0.646	0.452	0.484	8
Goalpokhar-2	0.411	0.582	0.436	0.476	9
Uttar Dinajpur Rural	0.471	0.645	0.474	0.530	

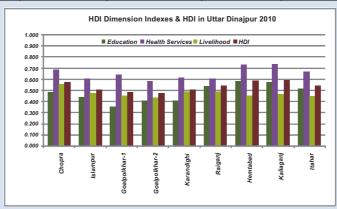


Table: Index Ranks of Uttar Dinajpur Blocks, 2010

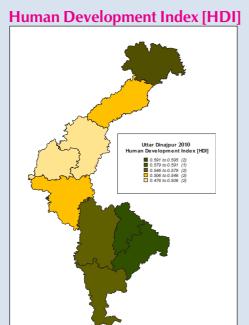
CD Blocks	Education Index Rank	Health Services Index Rank	Livelihood Opportunities Index Rank	Human Development Index Rank
Kaliaganj	2	1	5	1
Hemtabad	1	2	6	2
Chopra	5	3	1	3
Raiganj	3	7	3	4
Itahar	4	4	8	5
Islampur	6	8	4	6
Karandighi	7	6	2	7
Goalpokhar-1	9	5	7	8
Goalpokhar-2	8	9	9	9

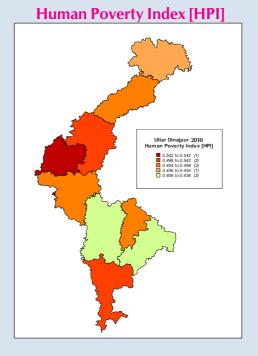
Source: Lead Authors' computations for Uttar Dinajpur DHDR, 2010

Modified HDI indices for the Uttar Dinajpur block, expressed as the simple average of these three HD dimensions, measure and rank the composite level of human development attained by each block. While Kaliaganj and Hemtabad blocks emerge at the head of the district, helped strongly by favourable healthcare and education attainments, Chopra is the sole block under Islampur subdivision that has done relatively well. Although, like the other Islampur SD blocks, Chopra too suffers from educational deprivation, it ranks third in terms of HDI standing well clear of the other Uttar Dinajpur blocks in the availability and diversification of livelihood opportunities, while also offering equitable health access. Raiganj and Itahar blocks which follow in the fourth and fifth positions in terms of their HDIs, lag well behind Kaliaganj and Hemtabad in their education and health attainments even though the livelihood indices in the four Raiganj SD blocks are clustered fairly close together. With better levels of livelihood diversification prevailing in the contiguous Raiganj-Itahar region which forms a major communications axis between the cities of Raiganj and Malda, workers shifting away from agriculture to other livelihood activities tend to congregate in this region, leading with time to higher population pressure on the education and healthcare infrastructure. In contrast, the neighbouring blocks of Kaliaganj and Hemtabad have smaller block populations and can thus serve healthcare and educational needs more equitably, enabling them to advance to the head of the district in terms of overall human development.

The four blocks that lag behind in terms of overall levels of human development are all located in Islampur SD. While Karandighi does relatively better among them in terms of access to livelihood opportunities, it suffers from relative deficits in education and healthcare access, consequently allowing Islampur to move ahead to the sixth overall position because of relatively better educational access. Since the HDIs for Goalpokhar-1 and Goalpokhar-2 lag well behind the district HDI average of 0.530, strong evidence emerges of the depth of human development deprivation that exists within these two blocks. Goalpokhar-1 offers a peculiar instance where very high levels of educational deprivation are partially offset by more equitable access to health services and livelihood opportunities, enabling it to occupy the eighth position in Uttar Dinajpur in terms of overall human development. With an HDI of 0.476, Goalpokhar-2 lags far behind all other Uttar Dinajpur blocks in terms of all human development dimensions, except for education attainments where it is placed above Goalpokhar-1 in the eighth position. With the human development deficits between Goalpokhar-2 and the first-ranked Uttar Dinajpur block being widest in the case of education and health service access, the importance of setting new priorities in Uttar Dinajpur district that can strengthen the provision of equitable and improved education and rural healthcare to these highly deprived blocks cannot be overemphasised.

MAP: Spatial Comparison of Human Development & Human Poverty across Uttar Dinajpur





Poverty & Deprivation within Uttar Dinajpur

Computation of block-level human poverty indices [HPIs] for Uttar Dinajpur follows the procedure developed in the *Malda DHDR 2007*, and is thus a modification of the HPI used by the UNDP. Since the HPI is an inverse-valued coefficient that indices current levels of human deprivation, it is built entirely from negative indicators such as distributional inequalities and the persistence of human vulnerability and poverty. Since adaptations have to be made to the computational procedure to fit HPIs to the vulnerability indicators commonly available in the block-level database where income-based information is not available, human poverty in the modified HPI can be understood as a reflection of human development deprivation. Once again, since the indicators used for block-level HPI computations are census based, they cannot be updated till the next census is conducted. Accordingly, the HPIs for the Uttar Dinajpur blocks draw on data from the 2001 Census and from the block-wise BPL data available from the *Rural Household Survey [RHS]* conducted in 2002.

As seen in the HPI table, the attributes included in the HPI computation are all negatively weighted, i.e. high values for these attributes define high levels of deprivation. While the data drawn from the 2001 Census include block-level illiteracy rates, the proportion of non-working population, the proportion of landless agricultural workers among main workers and of marginal workers among the total block workforce. High levels for all of these would coincide with the diminution of earning capabilities and opportunities, the degree of assetlessness and the lack of regular work, thus closely reflecting the degree to which distributional inequities and income poverty are present within the block population. Additionally, since rural poverty is a group attribute affecting the entire rural household rather than specific household members, RHS data on the existing concentration of BPL families in the Uttar Dinajpur blocks are also included in the HPI computation. As the BPL definition is based upon multiple attributes of household poverty extending beyond income poverty, a modified HPI index based on these variables is able to capture the presence of human vulnerability and deprivation in the Uttar Dinajpur blocks which prevent certain population segments from leveraging the opportunities that have been created by human development.

Table: Modified Human Poverty Index [HPI] Computations for Uttar Dinajpur DHDR, 2010

CD Block	2001 Population	2001 %Illiterates	2001 % Non- Workers	2001 %Agricul tural Labourers to Main Workers	2001 % Marginal Workers to Total Workers	2002 % Rural Families in BPL category	Human Poverty Index	HPI Rank
Goalpokhar-2	226472	65.1	66.7	51.0	22.9	65.3	0.542	1
Itahar	249541	51.9	53.6	47.5	34.6	64.9	0.505	2
Goalpokhar-1	245430	67.4	55.8	39.2	28.1	59.2	0.499	3
Hemtabad	118822	42.6	59.6	50.3	27.1	57.0	0.473	4
Karandighi	304986	61.6	61.1	42.5	27.0	37.2	0.459	5
Islampur	241951	60.8	67.2	40.6	17.7	40.7	0.454	6
Chopra	223022	55.7	68.6	29.1	13.9	50.6	0.436	7
Raiganj	347108	47.9	60.1	46.2	22.7	27.0	0.408	8
Kaliaganj	190019	45.2	54.7	42.9	25.1	35.4	0.406	9
Uttar Dinajpur Rural	2147351	57.1	50.1	38.6	25.1	46.7	0.435	

Source: Lead Authors' computations for Uttar Dinajpur DHDR, 2010

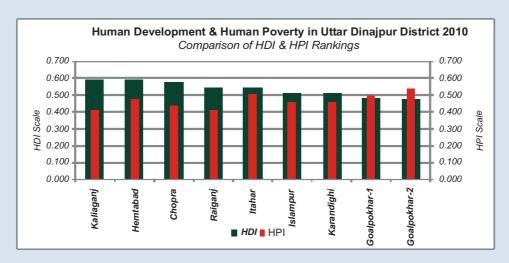
The modified HPI index thus draws special focus to socially and economically deprived sections in Uttar Dinajpur who have not benefited equitably from the process of human development. Even within blocks that show accelerated levels of human development, there are development victims who belong to marginalised categories within the block population and continue to live in poverty. The modified HPI indicators measure their presence within the Uttar Dinajpur blocks, noting that social sections living below the threshold of poverty can suffer educational deprivation, have less access to healthcare and nutrition, and marginal or no access to improved means of livelihood, etc. Since the block-level HDIs and HPIs are thus formulated on different intuitive premises, any combination of the two is theoretically possible. In certain blocks, high levels of human deprivation may coincide with acceptable levels of human development because of social exclusion among marginal segments. In others with greater distributional equity, human poverty may vanish with human development. In still others, human poverty may be the primary cause for low levels of human development, because of the concentration of marginalised segments within the block population. The HPI table, which portrays these characteristics for rural Uttar Dinajpur, can be analysed comparatively with reference to the earlier block-rankings in the HDI table.

With the highest levels of human development in rural Uttar Dinajpur, Kaliaganj block with an HDI of 0.595 also records the lowest HPI of 0.406. It is evident that the high attainments in terms of human development attributes are inclusive in nature, and have, therefore, been able to lower the concentration of poverty in the block. In contrast, second-ranked and contiguous Hemtabad, with an HDI of 0.591 that is very close to that of Kaliaganj, ranks fourth in terms of HPI, implying a higher concentration of poverty and partial exclusion of the poor from the human development gains recorded by other economic sections. Third-ranked Chopra, located far to the north, has been able to ensure greater equity in human development and lower concentration of poverty, therefore, ranking seventh in terms of HPI. The headquarters block of Raiganj, which ranked fourth in terms of HDI but offered the best livelihood opportunities in rural Uttar Dinajpur, accordingly, has a low concentration of poverty and achieves the second-lowest HPI of 0.408,

very close to that of Kaliaganj. In contrast, poverty and exclusion levels are very high in adjacent Itahar, which ranks fifth in terms of HDI but ascends to the second rank in terms of HPI.

The four remaining blocks cover most of Islampur SD, with the exclusion of Chopra. Among these blocks, Islampur and Karandighi rank sixth and seventh in terms of human development, with respective HDIs of 0.507 and 0.506 that indicate the existence of a wide human development gap between them and the lowest ranked Raiganj SD block of Itahar with an HDI of 0.546. However, in terms of the concentration of human poverty, they occupy a more favourable position than Itahar and rank sixth and fifth respectively in terms of HPI. The two Goalpokhar blocks are placed in the least favourable positions in Uttar Dinajpur, both because of low levels of human development and high concentration of exclusion and human poverty. Goalpokhar-1 nevertheless does better than Itahar in terms of HPI. Goalpokhar-2, on the other hand, is incontrovertibly the least developed block of Uttar Dinajpur district, with the lowest levels of human development and the highest concentration of human poverty.

While Goalpokhar-1 and Goalpokhar-2 thus form a regional cluster with very low human development in rural Uttar Dinajpur, Kaliaganj and Raiganj form a pocket of low human poverty. Exclusion and human poverty is otherwise widely present in the other blocks of Uttar Dinajpur, and is particularly severe in Goalpokhar-2 and Goalpokhar-1 because of low levels of human development. In Islampur SD. Chopra is the only block which records relatively low levels of human poverty, because the access to better livelihoods there has been largely inclusive. The other Islampur SD blocks all record high levels of human development inequity and human poverty, making the cluster of four blocks between Islampur and Karandighi the least developed region of Uttar Dinajpur district.



Evolving Human Development Strategies for Uttar Dinajpur District

After block-level indexing of human development and human poverty in Uttar Dinajpur had clearly identified leading and lagging regions within the district, detailed presentations of the Draft Uttar Dinajpur DHDR were made at separate meetings held under the chairmanship of the Sabhadhipati of the Uttar Dinajpur Zilla Parishad, before the District Planning Committee [DPC] and an Expert Group comprising all members of the DHDR Core-Groups and across-section of other stakeholders. Since as a constitutional authority, the DPC is statutorily empowered to direct the visioning exercise for Uttar Dinajpur district as a whole, and also to formulate and prioritise the District Plan by consolidating individual plans put up by the Gram Panchayats, Panchayat Samitis, Urban Local Bodies and Government line departments, the purpose of these consultations was to

- acquaint the DPC and the Expert Group with current human development situations in the district as reflected in the DHDR, and
- (b) seek firm direction from the DPC for the synthesis of a human development strategy for the district of Uttar Dinajpur to alleviate these current problems.

The issues flagged during these meetings with the DPC and the DHDR Core Groups constitute the basic foundation for human development strategy in Uttar Dinajpur. The core strategic elements first require the district to confront the historic deprivations inherited from multiple alterations in its administrative boundaries after 1947, which are responsible today for glaring regional disparities between its two sub-divisions. Next, the present educational inequalities within the district must be addressed in order to equalise educational opportunities across all blocks, thus enhancing the capabilities and functioning of the resident population. The third element of the human development strategy requires rapid upgradation of physical and social infrastructure, inclusive of healthcare, so that the people of Uttar Dinajpur are assured of the same entitlements that are available in the other districts of West Bengal. The fourth strategic element requires the amelioration of existing human poverty through the creation of equitable livelihood opportunities for the large concentration of socially backward groups that reside within Uttar Dinajpur. The fifth element of the human development strategy calls for substantive improvements in gender security, through a process which progressively empowers women in Uttar Dinajpur, enabling them to participate in a fuller way and on equal terms in social and economic life. The issues that need to be resolved in each of these five strategic categories are outlined below, along with potential approaches that may be applied in the case of Uttar Dinajpur.

A: Rectifying Longterm Impacts of Administration Reorganisation

Unequal development has long been the bane of the Uttar Dinajpur region, both when it was part of the erstwhile West Dinajpur district, and later since 1992 when it was reconstituted as a separate district. Because of the need to rebuild the administrative infrastructure in Uttar Dinajpur after each readjustment of district boundaries, many development activities in the district had been urban-centred, thus, leading to unbalanced development between the towns and villages. The Islampur region has thus suffered from an initial development lag which was never quite bridged. With time, this gap has widened to the extent that the two subdivisions of Uttar Dinajpur district now present widely diverging human development profiles. This basic problem is compounded by the fact that the district has a diverse multicultural complexion, with the Islampur region showing marked concentration of underprivileged communities and linguistic groups, including the SC, ST and Muslim communities as well as significant clusterings of Urdu and Hindi speakers. For equitable development of all cultural and linguistic groups residing within the district, it is imperative that these development disparities between the two sub-divisions be removed.

Although the separation of Uttar Dinajpur from Dakshin Dinajpur was intended to focus development activities towards the amelioration of regional disparities within the newly constituted district, the process of administrative bifurcation inevitably entailed the restructuring of departments and development programmes, creating another slowdown within the development processes experienced by the new district. With the total quantum of development funds being scarce, this restructuring is still not complete as of date. A particular instance where the impact of district bifurcation can be seen to have been particularly strong arises in the case of the Raiganj District Hospital. Originally a 168-bedded subdivisional hospital under the jurisdiction of Balurghat District Hospital in erstwhile West Dinajpur, the facility was redesignated as a District Hospital in 1992 after the creation of Uttar Dinajpur district. However, neither the overall bed-strength nor the complement of doctors and allied health personnel has expanded commensurately over the subsequent 17 years, making it difficult for Raiganj DH to cater to the entire health needs of the

district of Uttar Dinajpur satisfactorily. Many essential health services, e.g. blood bank facilities, etc. are still inadequately provided, leading to overall deficiencies in healthcare provision in Uttar Dinajpur. At BPHC and hospital level, many health facilities in Uttar Dinajpur still draw in additional patient-loads from adjoining villages in Bihar, and from the extreme western portions of Dakshin Dinajpur where the boundaries of the erstwhile Itahar block were readjusted during the bifurcation of Uttar & Dakshin Dinajpur. Similarly, as a number of patients from the two Goalpokhar blocks attend hospital facilities in contiguously situated Kishanganj - now a district headquarters within Bihar - and Siliguri in Darjeeling district, development of health infrastructure in the Goalpokhar region as well as through most of Islampur SD has consequently been slow. However, in many such cases, patients have to commute considerable distances to avail of hospital care, adding substantially to the time and costs of seeking and availing healthcare.

Following the bifurcation of Government departments between Uttar and Dakshin Dinajpur, other deficiencies persist in departmental infrastructure and personnel. In certain cases, such as the instance of Bureau of Applied Economics & Statistics [BAE&S], the concerned regional officer has to hold dual charge for both districts. In the case of the Public Health Engineering [PHE] department, which executes drinking water schemes across the district, staffing deficiencies have prevailed since the bifurcation of the department in 1992. The District Industries Centre [DIC] lacks a sufficient number of designated industrial estates, where the industrialisation of the district can be aggressively pursued. Even after the reorganisation of the district, the expansion of the network of SHCs and anganwadi centres in Uttar Dinajpur had been slow because of the deficiency of infrastructural funds. Meanwhile, with a large quantum of funds being expended on civil works to upgrade the administrative infrastructure at the new district headquarters at Karnajora, there has been an overall shortage of capital funding for other development projects that need to be taken up urgently in other parts of Uttar Dinajpur.

The obvious planning interventions that can be made in this respect by the Uttar Dinajpur DPC are

- (i) to articulate such persisting problems at the foundational stage of the District Plan,
- (ii) to quantify the resulting service disparities that adversely affect development in each block,
- (iii) to seek full funding support from the State Government for removing these longstanding lacunae which impact upon the overall human development profile of the district.

A time-bound course of action would also need to be defined to resolve the physical and administrative deficiencies within a fixed timeframe, based on dovetailed perspective planning by the District Administration and the line departments, and the execution of all outstanding development works on priority basis. At the end of the defined period, all infrastructural and administrative facilities within Uttar Dinajpur should have been brought to par with those available in every other district in West Bengal.

Removal of existing regional disparities between Islampur SD and Raiganj SD could proceed apace, by reprioritising the regional thrust of the District Plan. In particular, this would mean that the human development needs of the backward blocks under Islampur SD would need to be prioritised ahead of the needs of the more developed blocks in Raiganj SD, till the intrinsic disparities between the two subdivisions have largely disappeared. While a regional development strategy of this nature could involve some local contentiousness, it needs to understood that the development lag between the two subdivisions initially appeared because of adherence to the opposite scale of priorities, which for a long time gave precedence to the development needs of Raiganj SD over those of the Islampur region. Because of the high concentration of backward social sections within the Islampur blocks, restoration of regional equity is the only way of advancing overall human development attainments across Uttar Dinajpur district as a whole.

B: Redressal of Educational Inequalities

With primary school enrolments in Uttar Dinajpur showing a steadily rising trend over the past decade, the basic problem affecting educational attainment in the district is the high dropout rate after the primary stage. Improvement in the retention rates of students within the educational system through the years to come can thus be identified as a major human development target for Uttar Dinajpur district. Considerable imbalance exists currently between the capacity and outturn of the primary educational system and future opportunities for pursuing education through its middle and secondary stages. This forces substantial involuntary dropout of students from the formal system beyond the Class IV-V stage. Accessibility of rural schools is still a major problem in Uttar Dinajpur, with many students residing in the Islampur SD blocks having to travel distances of 4-6km to attend upper primary and secondary school. Since this problem particularly affects the enrolment of rural girls, at least two State-run hostels for Muslim and ST girls need to be established within Islampur SD to improve the retention of girl students within the secondary education system. Separate girls' high schools also need to be set up to improve the retention of girls at Majhiali and Haptiagachh, which are located at a considerable distance from the block headquarters at Chopra.

Several blocks in Islampur SD, where there has been a marked rise in primary enrolments, now also show unmistakable evidence of crowding and congestion, in the form of very high pupil-teacher ratios. The inevitable consequence of this is a deterioration in the quality of instruction. Strengthening of the educational infrastructure in Uttar Dinajpur will thus require the establishment of a substantial number of new schools, accompanied by the extension of classrooms and new teacher recruitments. Since the district has suffered from considerable educational weaknesses in the past, this new development effort will have to be made in a highly concerted manner over a short timeframe, necessitating the mobilisation of adequate State funding for uniform extension of educational opportunities across the rural areas of the district. Although the SSKs and MSKs functioning in Uttar Dinajpur district at present offer a low-cost alternative for universalising basic education, they cannot substitute in the long run for fully-fledged formal institutions. With high rates of population growth and consequent widening of the population segment in the younger age-groups, the demand for education is likely to increase even more through the years to come. Thus a comprehensive upgradation of the school infrastructure is strongly justified.

The necessity of expanding the teaching strength at primary and upper primary schools also entails parallel expansion in the intake capacity of teacher-training institutions. Since any new training institutions would have to meet strict NCTE norms, substantial investments would have to be made on these new facilities, so that the future staffing needs of the district school system could be fully met. To realise all these social objectives simultaneously, the District Planning Committee [DPC] at Uttar Dinajpur would need to formulate a medium-term perspective plan for upgrading the educational infrastructure in the district, and for ensuring that the educational aspirations of students belonging to backward blocks are fulfilled.

Because of the overall dearth of college institutions in the district, opportunities for pursuing under graduate education after the Higher Secondary stage are also limited. With most colleges being clustered around the district headquarters and adjoining Kaliaganj and Itahar blocks, pressure on the college system is highest in Islampur SD, where school enrolments and completion rates have increased substantially over the recent decades. Establishment of a general college at Dalkola in 1995 has not adequately relieved the situation. Given the potential student intake as well as the difficulties of internal communication within the subdivision, another college urgently needs to be established between Goalpokhar and Chakulia.

A large number of high school and College students in Uttar Dinajpur are first-generation learners, whose families have hitherto lacked an educational environment. Hence, career guidance centres need to be established at the school institutions to counsel them on their future choice of subjects and career options. Uttar Dinajpur still offers very limited avenues for vocational education. Since a growing proportion of the

district population will be school-literate in the near future, employment opportunities outside agriculture would have to expand commensurately. Thus the number of technical training institutions and polytechnics would also need to expand substantially, in order to equip non-collegiate students with the technical skills that would enable them to secure alternative employment. To achieve this, a new polytechnic or ITI could be established at Dalkola, in addition to the technical institute due to commence at Islampur from 2010.

The system of *madrasah* education in Uttar Dinajpur fills a vital gap within the district educational system, serving a vast region of Islampur SD with high minority concentration, where the system of State-aided schools is at present inadequate. The proliferation of unrecognised *madrasahs* through this region reflects the growing demand for education among the minority community in an area so far characterised by low literacy. A total of 1888 unregistered *beedi* manufacturing units now function within the district, directly employing 3687 workers and engaging many others - mostly women - in the home-based activity of binding *beedis*. The high incidence of child labour had previously been a serious problem in the Muslim-dominated areas of Uttar Dinajpur, because of high levels of landlessness and poverty among the Muslim population. Under the National Child Labour Project [NCLP], this has been partially ameliorated by establishing 45 NCLP schools, primarily for the children of *beedi* and brickfield workers. However, for NCLP to have a salutary impact on the child labour profile across the district, at least 200 NCLP schools need to be established in Uttar Dinajpur to cater to the combined educational needs of the Muslim, SC & ST communities, among whom landlessness and poverty is generally high.

In the Karandighi region, the recent proliferation of *beedi* binding has enhanced family incomes among the Muslim community, followed by greater demand for education. Enrolment of girl children at the *madrasahs* is thus particularly high, touching 65 percent at the Rahatpur High Madrasah. Many children belonging to the SC & ST communities also enrol at the *madrasahs* after completing their primary education elsewhere. Since there is an overall shortage of upper primary schools under the Government system, the *madrasahs* in the district which generally integrate primary with upper primary and secondary education provide an alternative recourse. However, since Government assistance in support of *madrasah* education is only available to Junior High and High *madrasahs*, the proliferation of unrecognised *madrasahs* at the primary stage is largely unmonitored. Given the vital importance that the *madrasah* system holds for education in Uttar Dinajpur, the Government policy in this regard needs to be reconsidered so that the State-recognised *madrasahs* can gradually emerge as an alternative system extending comprehensive education from the primary to the secondary and higher secondary stage.

Although the Islampur SD areas in Uttar Dinajpur have a substantial Urdu and Hindi speaking population, low access to Urdu-medium Government schools is an important cause for the proliferation of *madrasah* education in the Muslim-dominated areas of the district. However, since few high schools and collegiate institutions in Uttar Dinajpur have provisions for teaching Urdu, the scope for higher education for Urdu-speakers is limited. While more Urdu and Hindi medium schools need to be established in Uttar Dinajpur, separate focus also needs to be laid on procuring adequate supplies of textbooks in these languages, and on the recruitment of an adequate number of Urdu and Hindi speaking teachers through the School Service Commission [SSC] for posting at the Government schools located within Islampur SD. A second step in redressing this problem would be to establish an Urdu and a Hindi college in Islampur SD, with academic support drawn from the West Bengal Urdu and Hindi Academies. This would do a lot to ease the problems currently faced by Urdu and Hindi speakers in the district, who presently have to go to Bihar to pursue higher education.

C: Improvements in Physical and Health Infrastructure

With an unfavourable geographical location that straddles a long international border and the truncation of its transport and communications network as a result of Partition and subsequent administrative reorganisation, Uttar Dinajpur still faces serious shortages in physical infrastructure that tell on its development levels and social welfare performance. Both in the headquarters sub-division of Raiganj where many sub-divisional facilities have still to be upgraded fully to district-level, and in Islampur SD where the transferred areas still depend on adjoining Kishanganj in Bihar for major communication linkages, these infrastructural limitations ultimately show up in the form of regional human development deficits.

Although a large number of rural roads in Uttar Dinajpur have recently been surfaced with black-tops, drawing upon PMGSY support, the road network in the district will have to be upgraded and expanded substantially for the rural economy to develop adequate market linkages. The dearth of communications is especially felt within Islampur SD, where the principal highway link skirts the western fringe. Since four-laning of the highway and its ultimate conversion into a toll-road will seriously affect the development of internal communications, adequate investment should also be made to upgrade the parallel 'Bengal-to-Bengal' roadlink which has the potential to draw internal traffic from the underserved villages located along the eastern border of the district.

While existing deficiencies in educational and healthcare infrastructure in Uttar Dinajpur also to some extent reflect the inheritance from the administrative reorganisations periodically experienced by the district, subsequent provision of these amenities has not been evenly spread between the two subdivisions, leading to critical social infrastructure bottlenecks in the five Islampur blocks. The physical isolation of these blocks from the principal urban centres in Uttar Dinajpur also impedes the posting of requisite personnel, as a result of which the rural PHCs at Kanki and Torial currently lack resident medical officers. Laboratory facilities at rural PHCs are similarly weak. Because of difficulties in recruiting adequate male staff willing to serve as health assistants at the rural SHCs, the programme of institutionalised healthcare visits to rural households served by the SHCs suffers, considerably weakening health monitoring as well as the referral healthcare systems. Meanwhile, many rural residents in the isolated villages and blocks are forced to depend on the services of dubious healthcare providers such as quack doctors.

Sustainable public healthcare requires sufficient staffing and adequate clinical infrastructure. With the increase in district population and fast-growing patient loads, the primary healthcare system in Uttar Dinajpur is currently unable to provide satisfactory rural healthcare coverage. The available bed strength at many BPHCs is highly insufficient to meet the anticipated needs of the block population. No beds are available at the health centre at Kanki, which forces many indoor patients to seek private hospitalisation as far away as Siliguri. With no BPHC being located in the block, the population of Karandighi is similarly underserved by the existing 30-bedded rural hospital, and thus has to depend to a considerable extent on the indoor healthcare services extended by the District Hospital at Raiganj, ultimately lowering the efficiency of the referral healthcare system. Inadequate emolument scales also affect the appointment and retention of healthcare technicians, partially weakening pathology services at the BPHCs. Meanwhile, mushroom growth has occurred in private clinical and pathological establishments across the district, whose services often involve prophylactic and quality concerns.

Since public healthcare coverage in Uttar Dinajpur had hitherto been poor, the rural population will also need to be conditioned towards wider acceptance of modern healthcare. A comprehensive information, education & communication [IEC] strategy thus needs to be formulated for the district as a whole, involving civil society partnerships for health outreach. Although the provision for appointing a grassroot accredited social health activist [ASHA] for each village with 1000 population under NRHM makes another important

step toward this, the number of ASHA workers to be appointed and their training needs would be immense. Hence the programme for healthcare extension in Uttar Dinajpur will have to be carefully coordinated and planned, so that it does not flounder at this critical stage. Given the NRHM coverage norms, the number of SHCs in Uttar Dinajpur is presently inadequate and will have to expand substantially for referral healthcare and health acceptorship to improve. During the process of upgrading the SHC network, there would also have to be some rationalisation of the service loads through reassignments of villages to be covered by the existing and new SHCs. At this stage, considerable attention would need to be devoted to locate these healthcare facilities optimally, taking into account the distances that would need to be covered by the healthcare seekers as well as the existing communication links they would need to traverse.

Because of the dearth of SHCs and AWCs in the district, the delivery of immunisation and RCH services in Uttar Dinajpur is still very weak. Institutional deliveries are still relatively rare, leading to the high persistence of neo-natal and post-natal deaths among mothers and infants. Besides the District Hospital at Raiganj which has been upgraded in name but still functions within the infrastructure of a subdivisional hospital, the State General Hospital at Kaliaganj functions within the infrastructural framework of a rural Hospital. Considerable upgradation of the healthcare infrastructure in the district will have to be made, before improvement occurs in the rural health situation. Establishment of an ESI hospital in Uttar Dinajpur is also required to ameliorate health situations among the large number of brickfield workers in the district.

Although the Union Government has recently announced its intention of establishing a 960-bedded superspeciality hospital at Raiganj, on the lines of the All India Institute of Medical Sciences [AIIMS], the prevailing health situation in the district will only show distinct improvement if the entire referral healthcare infrastructure is also revamped, with adequate provision of health institutions and health staff at all tiers. Since an opportunity for accomplishing this has now arisen under NRHM, Uttar Dinajpur needs to make full use of this opportunity, in order to place healthcare attainments in the district on an even keel.

D: Amelioration of Livelihood Situations

Even though Uttar Dinajpur is a major rice-producing district, the current level of agricultural technology is generally poor, combined with a substantially underdeveloped irrigation potential which restricts the productivity of small and marginal farmlands. Crop losses are a frequent feature during the season of rains, because of the location of large parts of the district along the active floodplains of the Mahananda and Nagar. The problem has become critically acute in the region between Raiganj and Itahar where protection works along the Kulik and Nagar are urgently needed. The dominance of rice in the cropping profile of Uttar Dinajpur has led in recent years to the addition of substantial rice-processing capacity, with over 15 registered mini ricemills, located mostly in Islampur SD. In addition, the unregistered rice-milling sector forms a major cluster within the district, with 4911 small-scale units that collectively employ over 12,600 workers. Large quantities of jute are also produced in the marshy and riverine tracts of Uttar Dinajpur, as a result of which several downstream industrial units that process the fibre into texturised jute yarn have already been set up in the main jute-producing region. While these could form the future core for an integrated complex involving the manufacture of high-value jute products, this potential seems to have been overlooked and no proposal for such an industrial complex is in the pipeline at present. A project of this order could be initiated and sustained if two high-volume jute mills were established to serve jutegrowers at Islampur and Raigani subdivisions and offer them adequate price-support.

As a major agricultural district, Uttar Dinajpur holds considerable potential for agro processing industries. More mini rice mills and rice bran oil extraction units can be set up across the district, with adequate institutional support. Under a closed production cycle, the large volume of rice husk produced by these rice mills would also provide a valuable source of energy to other industrial units. On the same principle, a modern petrochemical cracking unit has been established recently outside Kaliaganj, which processes

petrochemicals brought down by tanker from the Haldia production complex into light aromatics like benzene and toluene for distribution through North Bengal, Bihar and Nepal, using rice husk as its energy source. Other agro based units can also be established outside Islampur for processing tomatoes and pineapples which grow well in the Chopra-Islampur region, while a turmeric processing unit can be located at Goalpokhar.

Through most of Uttar Dinajpur, the expansion in rice production has been based on the enhancement of irrigation, primarily through the mechanism of energised shallow tubewells and river-lifts. However, with rural electrification rates in the district being poor, these energised irrigation systems depend heavily on the unsubsidised use of diesel fuel, greatly raising energy costs while also reducing the competitiveness of rice producers in Uttar Dinajpur. Although the ultimate solution will be offered by the Tista Barrage Project [TBP], which has the potential of irrigating a command of 1.94 lakh ha of agricultural land in Uttar Dinajpur through inexpensive surface-based irrigation technologies when its first substage is complete, the tardy progress made by TBP means that this event lies far in the distant future. Until then, multicrop agriculture in the district will not reach its full potential. A strong case, therefore, exists for accelerating the implementation of TBP in Uttar Dinajpur, especially since the project has now been reclassified as a project of national importance and is thus eligible to secure enhanced funding commitments from the Union Government.

The Dinajpur region has traditionally been known for cultivating a large variety of indigenous aromatic rice strains, of which the *Tulaipanji* variety is native to the Raiganj region. Another variety which is now nearly extinct is the Joshoa rice strain still grown in isolated pockets of Karandighi. Most other local rice varieties have now been eclipsed by modern rice hybrids, which have a shorter production cycle and guarantee higher grain yields. Nevertheless, a serious initiative needs to be mounted for preserving the indigenous rice strains that are still cultivated in pockets by marginal and small farmers in Uttar Dinajpur, many of which can be grown with minimal application of inputs in adverse weather conditions. Considerable research is being done in neighbouring Bangladesh in conserving the traditional varieties of Bengal rice. A similar effort can be initiated in Uttar Dinajpur to protect the agro biodiversity of indigenous rice varieties, which represent the accumulated bio-capital of the region's farmers.

Livestock-based livelihood activities, involving the rearing of cattle, goats and backyard poultry, have a long tradition in Uttar Dinajpur. Several parts of the district produce a milk surplus, which can be enhanced further through breed improvement and fodder cultivation. Goatery projects have been encouraged across the district, as a result of which the Islampur region now meets a considerable part of the meat demand from Siliguri. Establishment of a tannery unit near Islampur would allow the processing of hides sourced from across the surrounding region, eventually forming a base for leathercrafts in the district.

Except for areas within Chopra block where small-grower tea plantations have been established in large numbers, agricultural diversification in Uttar Dinajpur has so far been slow, because of the dominance of rice cultivation. The Panjipara area under Islampur SD and the Birghai area under Raiganj SD produce substantial amounts of horticultural crops. However, because of the lack of cold storages, alternative cropping patterns have yet to take firm root in the district, minimising the year-round opportunities for wage-work available to agricultural labourers and lowering effective wage-rates and earnings. During the season of agricultural slack, a pronounced tendency has thus developed for male agricultural workers to seek casual employment opportunities by migrating to other states and districts. This nevertheless has the social downside of destabilising rural families and forcing an increasing number of women to carry the dual responsibility of looking after their families while seeking out locally available work. Return migration by these male workers also compounds the transmission of communicable diseases, besides greatly increasing the transmission risks of HIV/AIDS in the district.

With substantial migration of young male workers outside the district now taking place, a critical gap could conceivably appear in the rural labour market within Uttar Dinajpur at certain times during the year. However the overall impact of labour outmigration has been lessened so far by informal inflows of agricultural workers from adjacent areas in Bangladesh and Bihar during the peak agricultural season. As evident in border regions like Hemtabad and Goalpokhar-1 blocks and the Bhatun region of Raiganj block, most of these workers usually enter the district on labour contract and leave after the peak season is over, and do not settle permanently in the receiving regions on a long-term basis. However, since they encourage the long-term labour outflow from Uttar Dinajpur by depressing agricultural wage-levels and increasing the wage-differentials with other regions, their movement ultimately has a major impact on rural labour profiles within the district. This phenomenon has become particularly severe along the border villages of Islampur SD, where unskilled boys as young as 13-14 years often quit school with the aim of joining the migrant labourforce that regularly finds work outside the district. As they leave Uttar Dinajpur in the company of the older family males who had migrated before them, the pattern is reinforced, leading to low skill-acquisition and the general absence of thrift and enterprise among the rural population.

Although Uttar Dinajpur is located along a principal highway axis and is well connected with Siliguri, adjoining Bihar and Kolkata, the dearth of medium and large industry in the district currently restricts the scope for alternative non-farm employment. High levels of rural poverty across the region also inhibit the growth of local markets, even though substantial scope exists for extending small-scale industry in the district because of the prevalence of low wage-costs. Paradoxically, the state-sector West Dinajpur Spinning Mills Ltd. established in 1975 as a major public sector unit to feed the traditionally strong handloom industry in the undivided district is now up for privatisation, because of its inability to competitively market its yarn even after its recent modernisation. Given the proximity of the spinning mill to the highly skilled artisanal weavers of the adjacent Gangarampur region in Dakshin Dinajpur, Uttar Dinajpur could still emerge as the future regional hub for an integrated textile complex located in North Bengal. However, revival of the traditional handloom weaving industry in the region would also depend to a considerable extent on new design inputs that can enhance the marketability of the local handloom products.

Several other artisanal trades are practised within the district, including the manufacture of fine pottery articles, folk musical instruments and *dhokra*, *sola*, bamboo and woodcrafts. Many of these trades have their origin in the antiquity of the Dinajpur region and are traditionally practised among the STs as well as the SC artisanal groups. Because of its proximity to forests, Chakulia was once a major centre for the turning of high-quality wooden wheels & axles for bullock-carts - a tradition that is now on the verge of dying out. Kunore is still a major centre for the production of *dhokra* craft, while Kaliaganj has a traditional base of pottery manufacture. However, in the absence of technical and institutional support, the market for artisanal products has dwindled considerably, while the rural population has now gained access to new industrial substitutes. The decline of artisanal trades threatens scores of craftsmen in Uttar Dinajpur with the loss of their traditional skills and livelihoods, reducing them ultimately to the ranks of unskilled agricultural labourers.

Although no organised effort has been made in the district so far to resuscitate traditional artisanal handicrafts, sufficient scope exists to expand their linkage with major urban markets, by showcasing their products and promoting them through major national and regional crafts councils. An initial experiment at reviving and sustaining *dhokra* craft is currently underway at Anantapur GP in Kaliaganj block, with advanced training being imparted to the artisans by craft experts from Santiniketan. However, for this initiative to realise its full commercial potential, an integrated effort at crafts revival needs to be launched across the entire district, under the direction of established crafts consultants, to identify potential producing centres and upgrade raw material supply-chains, product designs, equipment and manufacturing skills, invoking technical inputs

wherever necessary in order to increase production volumes. In pockets where artisan families live in large clusters, such as the potter colonies in Kaliaganj, technical inputs like electric kilns can increase the efficiency of the artisanal production process, while also permitting the diversification of products to include higher ceramic grades like glazed pottery and stoneware. Comprehensive interventions of this kind have already revived many traditional handicrafts in other parts of India, and with major tourism centres like the Dooars and Darjeeling situated close by, there is no reason why similar efforts would not succeed in Uttar Dinajpur.

E: Improvement in Gender Security

Increasing male migration from several rural regions within Uttar Dinajpur has generally had a beneficial impact on female work participation, leading to the growing economic engagement of women in the district. Nevertheless, since main work opportunities for women tend to be sparse, most women workers are primarily engaged in marginal work and are therefore unable to attain their full earning potential. New work opportunities for women in the district have also been created through the extension of the *beedi* binding activity and via the SHG movement. With high prevalence of rural poverty in Uttar Dinajpur, increased economic engagement of women merely eases the pressure on household incomes, rather than leading to a material change in women's economic status. In terms of social privilege, both rural and urban women in the district remain at a considerable distance from their male counterparts, evidence of which exists in the frequent incidence of crimes against women.

Because of the long borders of the district and constant movement between them, women in Uttar Dinajpur undergo separate personal security risks, with a significant number going missing every year. Cases of trafficking in women are often detected along the Uttar Dinajpur-Bihar border, involving women trafficked from other regions who are in transit through the district, as well as women locally trafficked from within Uttar Dinajpur. The routing of major National Highways through the district leads to the heavy movement of truckers, and a large number of roadside eateries that double up as redlight establishments after dark have sprung up overnight at the truckers' halts. Because of promiscuity, the truckers are also identified as a high-risk group in the transmission of STIs and HIV/AIDS. No rescue home has been established as yet for trafficked women in Uttar Dinajpur, making it difficult for rescuers to provide personal security to the trafficking victims. Since the proximity of borders offers a convenient getaway to the traffickers, many more cases go undetected. As a result, trafficking in women and children through Uttar Dinajpur has now reached the dimensions of a major criminal racket. Largescale movement of trucks through the district makes it easy for the racketeers to move their victims into other states. With the constant outflow and return of male migrants from the district, social vigilance is low, making it especially difficult to trace and apprehend the traffickers and their agents, who therefore operate with impunity in the border regions.

In view of such preconditioning factors, the trafficking of women and children for labour bondage and other immoral purposes poses a major crime risk in Uttar Dinajpur district. From an analysis of recent trafficking records, the common *modus operandi* is for returning migrants to bring back certain 'friends', who then contract false marriages with poor rural girls in connivance with some of their relatives, who are paid a handsome amount of money in return for such services. Hence, a system of preventive vigilance needs to be institutionalised in the border areas of Uttar Dinajpur, under which the local *panchayat* can maintain a marriage register and a migration register, thus allowing public verification of the antecedents of the outside parties that seek to contract a marriage with a local girl, and enabling the police authorities to be alerted in case suspicions arise. Activisation of women's Self-Help Groups in the villages offers another effective means of increasing social vigilance, since cases have already occurred where fraudulent marriages have been halted in time, because of the alertness of the SHGs. Women's SHGs can also offer peer support to the intended victims, in cases where the victim's family is a party to the crime.