Bangladesh Police: The issue of morale and efficiency | Coastal zone water management

MUHAMMAD NURUL HUDA

OREMOST among the considerations that determine the effectiveness, conduct and reputation of the police is its morale. Nobody will perhaps deny that a proper discharge of the functions of police is of the highest importance to the maintenance of the social order and the success of development programmes. Policemen have to be vastly legally empowered as against the citizens to carry out these functions. The manner in which they carry out those functions is dependent not only on how well they have been selected and trained but also on the state of their morale. Morale is dependent on a number of factors such as terms and conditions of service, public opinion and for policemen specifically, status in the eves of law.

Pay and emoluments

The considerations that should determine the remuneration of police officers were examined in the UK by Desborough Committee in 1919 and by the police post-war committee in 1948-49. The considerations detailed by those two committees are largely relevant to our situation and as such part of the aforesaid committees' deliberations are reproduced below

As a result of their enquiry, the Desborough Committee were "satisfied that a policeman has responsibilities and obligations which are peculiar to his calling and distinguish him from other public servants and municipal employees." They considered the police entitled thereby to special consideration in regard to their rate of pay and pensions.

"Further, when he becomes a constable. he is entrusted with powers which may gravely affect the liberty of the subject and he must at all times be ready to act with tact and discretion and on his own initiative and responsibility in all sorts of contingencies. The burden of individual discretion and responsibility,

placed upon a constable is much greater than that of any other public servant of subordinate rank."

"We consider it essential that the sense of obligation to the public should be preserved in the police and the reason we dwell on these considerations at some length is that they are fundamental to the views we have formed as to the status of the police and the pay they should receive."

... a constable is subject to social disabilities by reason of his employ-

rior/supervisory officers are few and as such promotion prospects are much less. Under such circumstances, it is difficult to expect high idealism and social motivation in the discharge of police functions.

Distrust of law

The Bangladesh criminal procedure code and the evidence act look upon police officers with a distrust. which lowers their morale further. reduces their efficiency and affects their character. These laws were placing the police "under the general direction and control of the District Magistrate" needs to be reexamined in the context of our present social situation and the kind of police officer that we wish to have through a modern system of recruitment and training

Diversity of jobs

The career pattern of senior police officers in the existing system is strictly confined to police jobs. This leads to a narrow departmental outlook. Therefore, to widen their

The issue of improving the professional efficiency of the police has many facets. Efficiency is the end product of several variables like workload, personnel strength and organisation, legal procedures and methods of working, equipment, scientific aids, specialisation etc. It is, therefore, necessary to set up a high level body to examine our police system in all its aspects in detail in the light of emerging social conditions and value systems and the urges and aspirations of a democratic society.

ment ... it is only just that his remuneration should be such as will not add to his temptations the difficulties and anxieties incidental to an inadequate rate of pay.'

In our case, the present position is that the constable is equated not only in the people's mind but also in the wage structure determined by government with unskilled labour and the sub-inspector's position is a

Accommodation

The housing condition of the lower ranks are not satisfactory. Less than five percent of the constabulary are provided with residential accommodation. The issue is so vast that the accommodation of subordinate police officers by itself should be treated as a perspective scheme in the development planning exercise. **Promotion prospects**

The overly responsible and discreet

nature of police function will naturally demand an officer-based organisation to ensure proper functioning. The ground reality is

enacted at a time when an unorganised and ill-paid police was just being transformed into an organised structure with its own officers and that they were not the result of any principles of jurisprudence. Many police officers complain to the effect that the public could not be expected to trust the police when the law itself did not do so. The fact is that the distrust of the police is not only widely known but also manifests itself everyday in court thereby denigrating every investigating officer.

Laws relating to confessions vary from country to country but is not altogether inadmissible in evidence as in our country. One view is that the law of evidence should now be less tender to the criminals generally and that there should be some onus placed on the accused in the matter of his defence. The whole matter deserves consideration in the context of the morale of police and effect on their efficiency.

The organisational feature of

mental and intellectual horizons it seems necessary to expand their employment opportunities so as to provide for a direct contact with other areas of national development. The employment of suitable police officers in non-police jobs will lead to an improvement in the morale of the service and its social

Separation of investigation from order functions

The maintenance of law and order takes up most of the time of the police officers and men in the police stations and they can pay intermittent attention to the detection of crime. Therefore, there should be an effective separation of the investigation from the law and order personnel in police stations, specially in the cities. The ordinary citizen naturally expects prompt attention from the police in matters requiring investigation or enquiry or cases of missing persons. The separation of the investigating machinery will ensure undivided

investigative staff may operate in plainclothes and be more welcome to people.

Expenditure on policing Our national planning process does not adequately take note of the need of strengthening the law enforcement agencies to the extent necessarv to meet the emerging challenges. We should not be oblivious of the reality that the benefit of enlarged recruitment will be offset it scientific and technological facilities are not provided in adequate measure. Since all aspects of modernisation of police organisation will involve substantial financial investment, this expenditure has to be an integral part of the planning process and thus help to resolve the organisational problem.

The issue of improving the professional efficiency of the police has many facets. Efficiency is the end product of several variables like workload, personnel strength and organisation, legal procedures and methods of working, equipment, scientific aids, specialisation etc. It is, therefore, necessary to set up a high level body to examine our police system in all its aspects in detail in the light of emerging social conditions and value systems and the urges and aspirations of a democratic society. Such a body may consider what changes are required in the existing organisational structure, the powers and duties of different ranks of police officers, the criterion determining their emolument and conditions of service, required changes in the police Act and other laws that requlate the functioning of police, the appropriate financing machanism the police system and the requirements for prompt dispensation of criminal justice.

Muhammad Nurul Huda is former

MD SAEEDUR RAHMAN

VERY major river system of the world has a unique delta region, each with specific problems. Still there are some characteristics that all of these regions have in common. All deltas for ages have been crossroads of civilization and have become places. for 40 per cent of the human habitation. The system that runs through deltas carry fresh water and nutrients that are critical for sustaining life inside the deltas and out in the oceans. The environmental conditions are created, spawning the development of the unique flora and fauna through the mixing of the salt and fresh water associated with areas in the coast exposed to tidal flooding.

Bangladesh's coastline along the north tip of the Bay of Bengal is 710 km out of 504,000km of the world. The landward boundary of the coastal zone has been based on tidal water movements, saline water and, cyclones and surges. Nineteen administrative districts on the south as such fall within the coastal zone. The seaward territorial boundary up to 12 nautical miles and Exclusive Economic Zone (EEZ) up to 200 nautical miles are the options. The downward boundary may be up to the full depth in which mineral resources and ground water are extractable. Dialogue on delineating the coastal zone is close behind.

Coastal zone encompasses the interface between land and sea. but the specific concerns and interests of coastal zone water management concentrate on areas in which human activities strongly impinge upon both the land and marine development. The interface creates a unique combination of (i) a range of vulnerabilities and (ii) unrealised development potentials. Many of those vulnerabilities and especially their coincidence are unique to the coast. They create an atmosphere of insecurity and uncertainty, which lead to risk minimising strategies that discourage investment. The vulnerabilities have been identified as widespread poverty, limited livelihood opportunities, poor levels of service provisions, poor infrastructures, continuous threat of cyclones and storm surge, climate change induced impacts, ongoing process of land erosion, severe drainage congestion, water and sanitation, decline in viability of many distinctive and threatened coastal ecosystems, resources degradation and poor resource management and, salinisation. The opportunities for realisation of the development potentials are marine resources, accretion of land, productivity of mangrove and other ecosystems, salt production, ports and shipping, oil and gas resources,

tourism and energy. Primarily, the country's coastal land has been estimated as 47 thousand sqkm with population at 35 million which in same terms more or less represent one-third and onefourth respectively of the national totals. The poverty rate in the coastal zone is 53 per cent as against 48 per cent for the whole of Bangladesh. The coastal population largely depends on marine fisheries and agriculture for subsistence.

Over the last decades more than 200 development initiatives ambient to water resources have been parachuted in the coastal zone at least by twenty government organizations in tandem with as good as 100 other programmes complementary to infrastructure development

largely germinated from local level by almost twenty NGOs in attempt to sustain the efforts. The total investment cost has been estimated at US \$ 800 million of which ten percent shared by NGOs with supports from the different international agencies. The singled out incompatibility between the GOs and NGOs is the reciprocity in organisational culture, behaviour and attitude. GOs had all along been driven while NGOs were supported by the donors. Often as such. GOs within themselves and beyond with NGOs enter into conflicts. The politicians barter interests with both GO and NGO. The synergy is the push-batter of the national goals and objectives

The hot-from-oven completion seminar on Khulna-Jessore Drainage Rehabilitation Project (KJDRP) comprising Baitaghata, Daulatpur, Dumuria, Fultala under Khulna district and Kotowali, Abhoynagar. Keshabpur, Monipur under Jessore district covering a gross area of 100,600 ha. has set a unique exam-

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looking. To develop a positive attitude towards the public they are intended to serve, to be willing to expose themselves to public scrutiny and, in general to be transparent in operations. It is necessary to think more in terms of process rather

than in results.

ple of coastal water management bringing dramatic changes in the land use patterns by waning the twenty years old acute ponding problems of the area; albeit leaving question marks on its management. The project level poverty has been reduced from 75 per cent in 1993 to 53 per cent in 2002 increasing food grain production to 194,000 tons per year. The far more recently carried out impact assessment study of the Coastal Embankment Rehabilitation Project (CERP) providing secured environment to life and property in 150,000 ha. has stimulated the increased agricultural production roughly by 70-80 per cent. The community involvement in water resources management under the project has contributed towards increasing agricultural production, resolution of potential conflicts, and generating economic growth eventually supporting the poverty reduction strategy. The coastal zone has all the way been a focal point of nation's socioeconomic development. Concurrently, the exploitation of the resources at its astronomical heights added with toxic chemicals. industrial effluents and oil spillage from vessels and mechanised boats including remnants jettisoned from ship breaking polluting the coastal zone have been the cause of concerns. Dumping of wastes from artificial hatcheries has also been causing pollution in the sea threatening the growth of sea fishes and causing death of marine animals. The deadly snail disaster at Cox's Bazar beach in April, 2002 is an indicator of the status of our bay The natural resources degradation and environmental pollution are emerging as major problems in the coastal zone, with a complex and fragile ecosystem involving freshwater, estuarine and marine habitats that are crucial to sustainable marine resources already degraded and now under threat of irreversible change. The coastal resources tend to be

exploited at levels placing increasing stress on viability of the ecosystem has become common for stake holders to be interested in sustainable management where the limits of sustainable development have been exceeded. The growing population pressure and the related socio-economic consequences made extensive demands on the development of land use patterns and infrastructure requirements for the use of water resources, thus risking the quality of life of our future generation. Awareness is increasingly growing among stakeholders and beneficiaries that, within economic social and environmental contexts, are meeting the challenges presented by planning the sustainable management of the nation's coastal waters.

In such a planning process, an important role is emerging for GOs who are on board to participate in this process with its special knowledge of evaluating the possibilities and consequences of complicated infrastructural and water manage ment systems and the methods and structures necessary to operate and maintain such systems. The changing role is shifting the GOs from construction agencies mainly active at the end of a decision making process, to management agencies that can act proactively in the early stages of planning. Non-structural aspects of the engineering probems have begun to share the structural solutions. Interdisciplinarv management has been elbowing the undisciplinary approach. But changing from builder to partner in socio-economic development is being impeded by the existing territorial and sectoral institutional structure including specific govt policies of generic nature.

Government organisation may continue to operationalise its traditional functionalities in designing, realising, and managing infrastructures for water management in the coastal zone and the protection of the coastal community from the vagaries of cataclysms and environmental extremities. Inevitably, GOs will have to become more outwardlooking. To develop a positive attitude towards the public they are intended to serve, to be willing to expose themselves to public scrutiny and, in general to be transparent in operations. It is necessary to think more in terms of process rather than in results. For facing the challenges more important are its vision, insight and flexibility to carry out the required functions. Atop, in any case, shall be the flag of strong leadership shrouded by firm sociopolitical commitments in attaining a sustainable coastal zone water management.

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Economics of gas export

Why we need to look into 'economic' prices

SAJJAD ZOHIR

HERE have already been two national reports on natural gas from the experts, series of seminars in the capital city and several writings in the national dailies; yet, the right choice on gas export remains as elusive as before! The proposal to export gas reportedly put forward by one of the international oil companies (IOCs) claims the country's reserve to be outrageously high that will allegedly support a yearly requirement of 0.4 trillion cubic feet consumption per year over a period of one and half century! While a large majority amongst the vocal civil society appears to have strong reservations against export of gas in any form, ing. At the same time, the qualified position taken by most of the experts contributing to the 'Committee Report on Utilisation of Natural Gas in Bangladesh', suggesting export of gas from new discoveries, is equally puzzling. The central issue to any sale, which even a noneconomist would agree, is the price; and this has largely been ignored in the discourse on gas export. Cursory references to prices centered on 'accounting' prices (to be explained shortly). The concept of 'economic' price, which is central to any decision on sales of nonrenewable resource, has not been dealt with by the experts. I propose to discuss these issues to suggest that the homework for making a decision is not yet complete; and that such work should identify a floor price to our policymakers below which no gas export is permissible, while they may have flexibility in making decision on any price above it. As a concluding observation, it is

proposed that the government should come out in the open on ceiling and floor prices respectively for procurement and sales before any such deal is formally closed.

Let us pose two different ques tions to the two opponent groups. To those who are against export of gas in any form, our question is: do you oppose export of gas irrespective of the price to be received? Or, is there a price at which you may be willing approve gas export? And, to those who are in favour of export, would you recommend export at any price? Or, is there a floor price below which export of gas will not be festations of price in gas-related negotiations and discourse, before proceeding to highlight some of the economic aspects underlying the proposed floor price.

Current production sharing contracts with the international oil companies (IOCs) consider (fob) Singapore prices of High Sulphur Furnace Oil 180CST (HSFO) as the basis for calculating the price to be paid by Petrobangla to the IOCs. I shall avoid the details other than noting (following an observation made in the Committee's Report) that there are floor and ceiling prices and the conversion rules as well as

price, it includes the rent component as well. By agreeing to pay this price to the IOCs, we have effectively given them the rent as well. And, as the following evidence suggests, that component may be well above half the price we have agreed to pay! The Committee's report clearly states that the cost of extraction by Petrobangla is only \$ 0.40 (40 cents) per 1 MCF, while it is \$ 2.50 for the IOCs. The readers may note that cost claims are made by the IOCs and the profit (stipulated price minus the cost) is shared between the IOCs and Petrobangla. One

to convert HSFO price into gas

It should be mandatory on the part of the government department/agency to declare in public the floor price of major sales (and ceiling price for major procurements) long before the deals are formally negotiated. It is currently a vogue among the multilateral donor agencies to consult with stakeholders -one may therefore even institutionalise mandatory public consultation on price fixations. Let greater transparency be the first step towards establishing greater accountability in the system!

recommended? It is quite possible that posed this way, the two camps could converge to a common understanding on the threshold (floor) price; and try to reduce the difference in perceived prices by directing efforts towards compiling relevant information. This would also set the parameters within which the political representatives and bureaucracy would be expected to operate. When the question on price is raised, even the opponents to export tend to believe that it is competitively determined and is given to us -- we either take it (export) or don't take it (refrain from selling)! It is therefore important to critically look into the various mani-

the ceilings differ between on-shore (Jalalabad) and off-shore (Sangu) gas extractions. Based on such rules, Petrobangla's purchase price has reportedly been in the range between \$2.50 and \$3.10 (approximately) per thousand cubic feet (MCF) of gas, the variation arising from fluctuations in Singapore HSFO price. The engineers are comfortable with such price setting since the rules of conversion account for the thermal equivalence between the two resources -- HSFO and gas. More importantly, many economists tend to believe that this is the price set by the 'invisible' hand; and is beyond any manipulation by a single buyer or a seller! It is therefore no wonder that the Com-

mittee's Report states, "in the event of substantial gas discoveries and the export yielding higher return than the current purchase price, Petrobangla's share might be a part of the export .". (No one needs to be convinced that Petrobangla will benefit if it can sell at a price higher than that at which it purchases!) Such an endorsement may be expected from an accountant too keen on ensuring positive 'profit', but not from a group of experts, including economists, delivering on the country's export of nonrenewable energy resources! There are two questions on price: (i) should the purchase price be as stipulated in the PSCs, or, is it too high; and (ii) should the same (accounting) price be considered as a basis for deciding on export (as the committee's report has done)? We deal with both these issues below.

The price of a resource received by a seller includes not only the cost of extracting that resource and a normal profit, but also the rent. The simplest example is a piece of lowlying land, which needs to be elevated for making it usable as a residential land. Everyone knows that the price of the residential land includes the cost of land improvements, normal profits on such expenses and a rent. In case of resources with limited supply, as in the case of urban land, the rent is the major component in the total price. The same applies for gas and HSFO as well. Thus, when one

considers only thermal equivalence

does not need to be an economist to understand why there will be incentive to show costs as high as possible. One guesstimate suggests that the actual cost would not exceed \$0.80 per MCF. In such case, one may conclude that the rent component hidden in the price of gas, in this particular context, is no less than \$ 1.50, which is the difference between the claimed and actual costs. Given that Bangladesh's natural gas has high methane content, acknowledged to be higher quality fuel, its price and therefore rent is likely to be higher than that apparent from the HSFO-based price figures.

Let me now turn to the second

question posed earlier: should the price stipulated in the PSCs be the basis for determining the price at which gas ought or ought not to be exported? Elementary text books in Economics teach us that no unique equilibrium price (and quantity) can be determined in a market with one seller and one buver -- and the outcome will depend on the bargains. This also generally applies to the case of gas export from Bangladesh. More importantly, gas is a non-renewable resource, and any decision to sell it ought to account for its alternative contribution to the domestic economy and society through domestic uses. In a market with many buyers and many sellers. and with no tax and subsidy, the price of a goods is often considered to reflect its economic value. This is however not true in case of domestic gas price. The latter is often set at low levels (thus, including economic subsidy) on the recognition that the returns to the society are very high. This is implicit in our policy of providing gas at lower prices to power plants and fertiliser factories.

While effort should be given to work out the economic returns to the society from various uses of natural gas and thereby arrive at the suggested floor economic price, let me unveil the audacity in the current export proposal with one example. It is a recognised fact that the most inefficient use of natural gas in this country is that for cooking in households -- almost 99 per cent of the heat is lost and there is great deal of wastage. Thus, the example provides a bottomline on the alternative economic returns from domestic use of gas. An estimate suggests that 3 MCF of gas will allow a household to operate a double burner, five hours a day, for one month. Suppose the export price of gas is set at \$ 5 per MCF, of which \$1 would account for the cost of transmission. The question is: would an urban household be willing to forego the facility of cooking with gas if the price for monthly connection of a double burner is raised to Tk 720 per month (equivalent to \$12)? If there are more unwilling persons, after thinking through carefully about the situation arising from not having such access, clearly a higher export price has to be realised before convincing the country to export I have tried to put forward seve

propositions. First, price should be the central (not necessarily exclusive) decision criterion for any decision to export gas. Second, have explained why the current purchase price stipulated in the PSCs is very high, forfeiting our share of the rent to the IOCs. I have also suggested on the loss figure, the gross can easily be calculated Finally, I have explained why the prices in PSCs cannot be the basis of any decision on export price. have argued that we should not be concerned with accounting profit and therefore should not confine to accounting prices. Rather, economic price, which captures the economy-wide contribution of a resource to the society, should be the focal point. It is quite understandable why firms are keen on monetising their investment and why they would be keen to overreport on reserve when contracts stipulate them to extract upto a maximum of 7.50 percent of the reserve. The policymakers in this country cannot however follow such

It is anybody's guess as to how the rent had been shared by various parties: and I wonder if there are legal ways to redress the lapses There are however two sets of actions, which need serious consideration. First, is there any way to make one accountable for past deeds? More precisely, would such party be made liable to pay for Petrobangla's dues, or, should the contracts be called null and void as has been done in the case of media? The legal experts are possibly the right persons to answer this question. Second, is there any way to ensure that the same thing does not repeat in future? On the latter, propose that it should be mandatory on the part of the government department/agency to declare in public the floor price of major sales (and ceiling price for major procurements) long before the deals are formally negotiated. It is currently a vogue among the multilateral donor agencies to consult with stake holders -- one may therefore even institutionalise mandatory public consultation on price fixations. Let greater transparency be the first step towards establishing greater accountability in the system

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A story of skill and success

JEROME SARKAR

EW steps and measures are usually taken with much hope to yield positive results. It is true that for success the initiative has to be appropriate, goal has to be set honestly and welfareoriented. The skill imparting training in tailoring is such an effort, and it has proved to bear an excellent result leaving a sustaining effect.

Benedita Khesh, an Adibashi woman of Gobindanagar village under Thakurgaon Upazila has been a brilliant example of such a success. She readily joined a skill imparting training in tailoring offered by the 'Adibashi Development Project' of RDRS Bangladesh in the middle of year 2002 and promptly picked the tricks of the trade. After completion of the 90 day-training course, she has become an owner of a sewing machine by the merit of her regular attendance at the training programme and successful completion of the course. Encouraged, she has started her own business at home without having incurred any additional financial

expense or involvement. She is now a full-fledged tailor and dressmaker. She cuts and sews garments such as frocks, pants & shirts for children, and also blouse and petticoat, etc. for females. She supplies the ready-made garments to shops. She also collects orders from neighbours and supply them customized finished products in time. Her customers are satisfied with the quality of her work and she has been enjoying the reputation and confidence of the people. Her business is gradually picking up. Her earnings through tailoring has reached around Tk.2000/= per month. She hopes to further her business in coming days with new designs and by adding embroidery

work. Benedita is an earning housewife. She is also a member of

"Campara Punabilee Mahila Samity" formed in May 2001 under the guidance of Adibasi Development Project. Presently the Samity has 25 Adibashi female members. They have formed a strong propensity to save. Their collective saving now stands at Tk. 11,000/=. The amount may seem very meagre by any standard but to the members of the Samity, this is an achievement. Besides, the group members have received orientation on elementary healthcare, inspiration for children education, home gardening and the relevant benefit of nutritional value, small income generating resources,

She has also started a kitchen garden on a 2-decimal plot of land in her homestead. The vegetables are basically used for family consumption. She grows seasonal vegetables round the year.

There is a small ditch by the side of the garden. The ditch emerged as the earth was cut and moved to raise the height of the homestead. The ditch has been turned into a mini-pond. They release fish fries to the pond and this pond caters to their demand for fish for six months.

Her house is bound by mud-builtwall with a single gate at the front for ensuring a better security. Big trees surround her homestead. The trees protect the environment around and keep the house cool especially during hot days in summer.

Benedita has three daughters. All of them attend school. The eldest daughter studies in the 5th grade and whenever aets time, extends her helping hand to her mother in tailoring. She is also learning sewing by doing. This practical knowledge will help her build her career in future. Siben. Benedita's husband pedals his own rickshaw-van and earns around 50-60 taka daily to support the family

A skilled housewife is an asset for the family. Benedita has emphasized the need of more such training

opportunities, which has brought good fortune for the Adibash

women of the locale. Benedita comes from the ethnic

background of Oraon, having different social, cultural, food habits whereas Siben has inherited Bengalee culture. They fell in love and braved to marry each other against the staunch protests from both the families. Having lost moral as well as financial support from both the families, they passed through a very tough time immediately after their marriage. But they accepted it as a great challenge in life. They remained faithful and sincere to each other and faced the situation boldly and patiently, and gradually by joint efforts formed a strong bond of love. Their love for each other helped them overcome the odds. Inspite of their different culture and social backgrounds and language barriers, they have been leading a happy family life for more than one and half decades, truly an ideal family.

It is obvious that the dark clouds of the hard days are slowly but surely disappearing, and the sunshine of is emerging. Benedita and Siben have proved that nothing is impossible in this world given the strong determination, perseverance, courage and patience coupled with an honest goal and a bond of sincere and true love. Benedita is especially grateful to the Adibashi Development Project being implemented by RDRS Bangladesh and sponsored by the Stromme Foundation of Norway. Her success, she says, is a positive impact of the Adibashi project. She hopes this would lead towards self-reliance among to the Adibashi community.

Jerome Sarkar is advisor of RDRS

Did you know?

In 1893, US President Grover Cleaveland struck with cancer. Doctors fear cancer is an aliean invader

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All health information to keep you up to date

LAVEA NOE DAY

Dr. Rubaiul Murshed

Around the world

When residents of Nishiaizu, Japan, need a medical check-up they only

walk as far as the computer terminal installed in their home. Heart rate, pulse and blood pressure are all routinely checked and noted by the computer, and the person is asked to key in any unusual symptoms like headache or shortness of breath. If necessary, the computer suggests changes in lifestyle as well. The data collected is conveved to the town's health centre and technicians look through the reports

everyday. Anybody at risk for stroke or similar adult diseases is quickly brought to the notice of the doctors. The home health check-up system was introduced when the officials found that the average lifespan in their town ranked 82nd out of the 90 municipalities and that average lifespan for their men was 74.8, one year below the national average. Research showed that this was due to an unusually high incidence of strokes in Nishiaizu, and that it could be

altered if high blood pressure is monitored regularly and treated in time. Health check-up terminals will eventually be installed in 300 out of the 3000 homes in the town, with priority given to people over 40 who are at risk for diseases like strokes.