

Calculating the Active Aging Index of Guwahati

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Abstract

The Active Ageing Index is a tool utilized by UNECE (UNECE, 2012) to quantify the present and future prospect of an elderly or senior citizen, to age actively in a nation. This tool is used exclusively for measuring the Active Ageing prospects of the nations of the European Union. The Index is prepared based on cross-sectional studies of senior citizens across 22 parameters. The index helps a nation identify the key areas of weaknesses in its goal of attaining Sustainable Development (WHO) of senior citizens, which aims to create an enabling environment for the senior citizens, based on their right to equal opportunity and equal participation in society. India is a signatory to all these instruments and is obliged to create such an environment. The purpose of this paper is to find out the prospective of Active Ageing (WHO, 2002) in Guwahati, as an experiment, to determine whether Active Ageing Index can be used at a micro level within India and further determine the areas, which may need policy intervention in this region.

The Phenomenon of Ageing

Everyone, who is born, will grow old. Ageing is a natural insecurity. Ageing brings changes to the functioning, cognitive ability, thought process, and way of life of a person. The organs of the human body become less efficient with age. This condition is called Frailty (Lunenfeld & Straton, 2013). People need support and care to sustain their life at this stage. This need is physical as well as emotional.

It is not essential that ageing has to be excruciating phase of human life. Planning and support from society can make it a worthwhile experience. Man, being a social animal, should be able to expect that society will look after him at his vulnerable phase. Social security is one of the principal rationales for the development of society. Laws are nothing but a medium that further the various interests of the members of society. Social security and inter-generational parity are two interests that need to be coordinated. However, the society and the family structure have evolved and this harmony is not maintained anymore. Therefore, the law has to interfere and re-establish the balance.

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Though many laws and policies have been made at various levels, the state of senior citizens is not improving. Support for senior citizens within the family can no longer be assumed. Often they are found to be ignored, ill-treated and discriminated against.

The world is undergoing a distinctive and irreversible change in the form of a demographic transformation. This shift has resulted in a, hitherto unparalleled, growth in the number of older persons, globally. While the fertility rates are declining across countries, life expectancy is increasing. This results in a swell in the number of aged persons in society. The number of senior citizens is predicted to be twice as that of the number of children, within the period between 2007 and 2050. The actual enhancement in their population will be more than triple. It is expected to reach two billion by 2050. The number of persons, aged over eighty, is likely to increase four times to 400 million. (Department of Economic and Social Affairs, 2017)

Though, India started working in this area from 1999 and brought many policies, the situation of senior citizens haven't improved. Even after more than a decade of passing The Maintenance and Welfare of Parents and Senior Citizens Act, 2007, the problems of our senior citizens seems to be on the rise.

The World Health Assembly has formulated a Global Strategy and a Plan of Action on Aging and Health. The purpose of this approach is to form an integrated, indivisible set of global priorities for sustainable development. The plan of action starts from a preliminary assumption that ageing is considered a valuable, though often challenging, progression. A paradigm shift in one's approach would be necessary to make ageing an optimistic and pleasing phase of life. There is a necessity to recognize the rights of senior citizens and facilitate them to thrive in the multifarious, ever-changing, and unpredictable nature of society. There is a need to nurture the capacity of senior citizens to contribute to society, without letting their age to pose any hurdle in such realization. The policy laid down two goals to be achieved within the period between 2016 to 2020. This period is for setting up the stage in preparation for the Decade of Healthy Aging, that is, 2020 to 2030. The goals require countries to utilize these five years to (i) create evidence-based action to maximize the functional ability of each senior citizen and (ii) establish evidence and alliances necessary to support a Decade of Healthy Aging from 2020 to 2030 (WHO, 2016).

A gradual movement towards a distinct acknowledgement of the rights of senior citizens is manifest in international efforts. The confirmatory action towards senior citizens is no longer based on the needs of senior citizens but based on the recognition of their entitlement under their right to equality in opportunity and participation. Senior citizens are no longer seen as inert recipients of state generosity but as a marginalized class within the society, who have been deprived of their basic human rights. The echo of this transformation can be felt in the Indian legal framework, too. Laws and Policies have been put in place to ensure the protection of the rights of senior citizens in India.

However, a perusal of the available data on the conditions of senior citizens in India revealed a conspicuous discrepancy. Basic data on the indicators associated with the problem of population ageing are missing. The vast available data relies on the Decadal Census, which was never calibrated to identify the problems of ageing. There is a lack of macroscopic data specifically related to the conditions of senior citizens. There are no longitudinal studies on the phenomenon of ageing in India or on the indicators of population ageing.

India is yet to adopt or develop a formal mechanism to study the problem of the population ageing or to generate a knowledge base for the future development of the law and policy in this area. Where the developed nations have moved towards an inclusive model for supporting its senior citizens and have developed appropriate tools for constant evaluation of their issues, India is still following a need-based model without any formal mechanism to measure the magnitude of the issue or the progress made in addressing them.

As already stated, one of the strategic objectives laid down by the World Health Assembly, to achieve its target of evidence-based action to maximize the functional ability of every senior citizen, was to develop research and monitoring of healthy ageing in every nation. The five years, between 2016 to 2020, was earmarked for the nations to build up its knowledge base in preparation for The Decade of Healthy Aging, to be celebrated from 2020-2030. Though piecemeal laws and policies have been made in India, a device to scrutinize the evidence-based action or research in this field has not been put into place.

The European Nations has developed the Active Ageing Index and has been using it to monitor their progress, since 2008 (UNECE, 2012). This Index is constantly upgraded to yield better and more accurate results. The advantage of this index is that it is specifically developed to analyze the situation of senior citizens. It uses uniform parameters for objective evaluation of the indicators of the condition of the ageing population and this not only allows monitoring of the progress made by the nations but also for comparing their mutual development and make policies for further development. It can identify the areas of weaknesses in the policies so that the governments can make amendments to their schemes and policies.

The Emergence of the Research Problem

The principal purpose of this paper is to determine whether Active Ageing Index can be used at a micro level within India and further determine the areas, which may need policy intervention in this region. A successful adoption of the AAI should be able to highlight the accomplishment of the Indian laws as well as its lacunae in addressing the problems of the senior citizens. This is an exploratory research, carried out based on the researcher's hunch that the piece-meal legislation and schemes made by the Indian Government and the gaps in its implementation are rendering them ineffective

in tackling the problems of senior citizens in India. It is because of these normative and implementation gaps, that the conditions of senior citizens have not improved, even after nineteen years of policy-making. While the inclusive model (right based) followed in many western nations focus more on active ageing and self-dependence, the Indian model is more maintenance-oriented (need-based) and thus fails to integrate senior citizens with society. India also incurs a huge expenditure to provide various kinds of services and benefits. Such policies also lead to wastage of human resource in the form of forced retirement of the aged but able senior citizens (compulsory retirement at the age of 60 needs revaluation as average life-expectancy and average healthy life expectancy has increased over the period of time and such retirement may be considered age-discrimination) (Schlachter, 2011). However, in order to identify the normative and implementation gaps, there is a need for a scientific tool like the Active Ageing Index, which is adopted in this exploratory paper, and a successful adoption will be able to highlight the accomplishment of the Indian laws as well as its lacunae.²

The Objectives of the Research

Therefore, this paper sought to apply the Active Ageing Index at a micro-level of Guwahati to find out whether the conducive environment required for equal opportunity and participation of senior citizens, that is Active Ageing, is being achieved in Guwahati. It also tried to ascertain if the Active Ageing Index can be used to analyse the situation of senior citizens in Guwahati, which should consequently determine whether it can be applied to study such conditions for entire Assam or India. The instantaneous result of the research was the determination of the scope of active ageing in Guwahati, and it should additionally help determine the key areas that may need immediate attention or policy intervention and for the future development of law in this area.

The paper made an attempt to determine whether the Active Ageing Index can be applied at a micro-level of Guwahati, which will require identification and calculation of comparable indicators of population ageing and evaluation of the performance of the legal framework across these indicators. It does not go for a cause-effect analysis of the problems of the senior citizens. Such an analysis would be only possible through a longitudinal study and not through a cross-sectional study like this one. Therefore, this study can only ascertain the factual position of the senior citizens and highlight the areas of strength and weakness of the legal framework. However, it needs to be borne in mind that the Active Ageing Index highlights the factual position of the senior citizens across the various indicators, which may be used to identify the areas which

² AAI has been experimentally applied at micro level in various nations and regions, including Asia, by researchers. See Zaidi, A., & Um, J. (2019). The New Asian Active Ageing Index for ASEAN 3: A Comparative Analysis with EU Member States. *Journal of Asian Sociology*, 48(4), 523-558. Retrieved May 3, 2021, from <https://www.jstor.org/stable/26868275>, Jane Parry, Jinpil Um and Asghar Zaidi. (2018). Monitoring active ageing in the Asia-Pacific region: Recommendations for future implementation of the MIPAA. *International Journal on Ageing in Developing Countries*, 2 (2): 82-98, Rossarin Gray.(2019) Active Ageing Index in Thailand. *Institute for Population and Social Research (IPSR), Mahidol University*, from <https://www.unescap.org/sites/default/files/Building%20a%20new%20index%20to%20measure%20active%20ageing.pdf>.

may need legal intervention or modification in the existing law. It does not identify any specific law which needs suitable modification. It determines the performance of the legal system as a whole. Identification of specific laws which need intervention or modification will need further analysis of the causes for the bad performance of the legal system across any indicator. As such, Active Ageing Index is the first step towards identifying the areas that need legal intervention or modification.

The Research Method Adopted

The execution of the laws in Guwahati, its effectiveness, reach and its impact was evaluated by the non-doctrinal method of sample survey. Primary data was collected by the researcher through questionnaires and interviews, conducted within a representative sample in Guwahati, to find out the socio-economic and medico-physical conditions of senior citizens. Data on the access to the welfare measures by the Government of Assam were also collected as required by the Methodology adopted by UNECE (The methodology, grading and the questionnaire is as prescribed by UNECE and not altered by the researcher) (UNECE, 2019 [10]). The data was then used to compute the Active Ageing Index of Guwahati and was compared with existing data of other nations (UNECE, 2019).

The sample size was based on Glenn's Table of Sample Size (Glenn, 1992). The survey was conducted among, more than 400 senior citizens, through a process of Random Sampling carried out between January 2018 to April 2018. Each subject was asked to fill up a questionnaire or interviewed with the help of the same questionnaire. This questionnaire for Active Aging Index was prepared by the United Nations Economic Commission for Europe (UNECE, 2012)

Grading

The subjective data was graded using the method described by the United Nations Economic Commission for Europe for obtaining the Active Ageing Index. Where subjective data was collected, options in sequential order, ranging from the best possible situation to the worst possible situation were given. The best possible situation was given a score of 25 and the worst possible situation was given a score of 0. The highest score that can be achieved in a particular query was thus divided between the numbers of options given in options for the answers. Thus, all such data was calculated on a scale of 0 to 25 (UNECE, 2012). The data was then analyzed using the indicators utilized by UNECE for calculating Active Ageing Index.

Limitations of the Research

Certain indicators, applied in the Active Ageing Index, could not be computed directly in the Indian context due to lack of data and difference in social values in India. These Indicators had to be suitably modified. Such conversions or replacements affect the

ultimate results, though the researcher has taken all possible care to minimize those. The Research is based on a sample size that should provide a Precision Level of up to $\pm 5\%$ and a Confidence Level of 95%.

The Active Ageing Index

Active Ageing Index is a flexible data-indexing tool used by European nations to monitor the overall progress of the nation to achieve the goals of active ageing. It identifies the domains where it is lagging. It collects data in twenty-two individual indicators. These indicators are categorized into four domains, namely, Employment, Social Participation, Independent Living, and Capacity for Active Aging. The first three domains help evaluate the actual achievements of the nation, while the fourth is a measure of initiating conditions for achieving positive active ageing outcomes. A country is given a cumulative score, which reveals the extent to which senior citizens are enabled and encouraged to participate in the economy and society, and to live independently. The data collected under these twenty-two indicators are analyzed to obtain the Active Ageing Index of the nation by using four methodical steps (UNECE, 2012).

1. First of all, all the indicators are expressed as positive indicators, taking on a positive normative judgment. It means that higher value suggests better prospects of active ageing. For example, the indicator 'at-risk-of-poverty' is expressed in terms of no poverty risk. The indicators capturing the care provided by senior citizens are considered positive because it adds value to society.
2. Each of the indicators is expressed in percentage, ranging from 0 to 100. However, it is to be noted that achieving 100 cannot always be considered maximum achievable, as it will signify the unlikely Utopian target of the best possible outcome. Hence, for example, the target for employment rate indicator for senior citizens is assumed to be full employment.
3. For each domain, the arithmetic weighted average of the indicators is calculated. These results in four gender-specific indices for each domain, namely, Employment domain index; Participation-in-society domain index; Independent-healthy-and-secure-living domain index and the capacity-and-enabling-environment-for-active-ageing domain index.
4. Finally, the overall aggregated indicator is then calculated as the arithmetic weighted average of the domain-specific indices. The final explicit weights used for the four domains are, respectively, 35, 35, 10 and 20 for the four domains (European Commission, 2012).

The advantage of using the AAI is that it provides a uniform basis for evaluating a country's or a region's progress as well as comparative analysis among various nations or regions. The Active Ageing Index has been used in the European Union since 2008 and its first report was published in 2012 (UNECE, 2012).

Criticism against Active Ageing Index

The Active Ageing Index is being constantly revised to make it more detailed and truer. It is not yet the perfect depiction of the problem of ageing and scholars argue about its accurateness about the factors and indicators or the means of obtaining them. The Methodology applied by the Active Ageing Index, itself, cautions of many such grey areas in it.

1. Active Ageing Index does not differentiate between part-time employment and full-time employment and, thus, the intensity of employment is missed out.
2. Active Ageing Index does not take informal voluntary services into account. This may have a negative impact on countries where formal voluntary services are lacking or unorganized³.
3. Care to children and grandchildren are feared to give rise to opportunities of exploitation of the senior citizens.
4. Means to evaluate political participation may not reflect the political set up of the country and therefore may not be suitable for every country⁴.

The Active Ageing Index may not be the perfect indicator of a nation's ageing population or their issues, but it is a scientific and homogenized tool for a comparative analysis of the ageing population of nations and the progress made in redressing them. The current methods used in India, to identify such indicators, do not reveal a true picture of the situation. The use of averages or 'arithmetic means' to assess income, for example, introduces systematic bias with a right heavy outcome. The researcher understands that the Active Ageing Index may not be the best tool to be applied in India, but unless some better tools are designed, this is a good way to start. The application of the Index to India might also be criticized, as there is a huge difference in the existing infrastructure and social structure between Europe and India. However, the problems associated with ageing are, more or less, the same and therefore, the indicators should reveal the positives and the negatives of the Indian system, as well. Certain modifications in the sub-domains were made because of the inherent differences in India (See Caveats). Due care has been taken to ensure that the effect of the alterations are minimized and comparable results are obtained.

The Active Ageing Index of Guwahati

Active Ageing Index has never been applied in India. Data required for indexing the various domains have never been collected. Due to the lack of existing data and the difference of parameters and approach between the Indian framework and the European counterparts, the Active Ageing Index could not be directly applied to India. Therefore,

³ Formal voluntary services are rare, if not absent, in Assam and therefore, informal voluntary services had been taken into account for calculating the AAI of Guwahati.

⁴ It has been modified, in this paper, to include taking part in political activities at the local level like Panchayats/Municipalities for the purpose of this research.

some of the available data on Indian indicators were converted to comparable European parameters. Due care has been taken to ensure that such changes and conversions do not affect the ultimate result.

Caveats

1. For this research, the entry age for being a senior citizen is considered 55 and not 60. It is in consonance with the European standards but not as per Indian definition which is 60.
2. The employment rate for Guwahati, for people aged between 14 to 60, is taken to be 95% based on official data published in 2015 and the employment rate for age group 55 to 59 is taken to be 76.2. (Press Information Bureau, 2019).⁵
3. Independent Living Arrangement for senior citizens is not a sought objective in India, it is still calculated for the sake of comparison. It is suggested that 'decisional autonomy' may be measured by direct questions relating to decision making by the senior citizen, by future researchers.
4. For Domain 3.4 and 3.5, the Median Income of persons aged below 60 of Guwahati is taken to be \$3 or Rs. 195 per day (Center for Global Development).⁶
5. Monthly savings are considered as disposable income for Domain 3.4.
6. Retirement Pension or other Old Age Pension is considered to be an income of the senior citizens.
7. Adult Literacy Program and Cyber Literacy Program are included within Domain 3.8 though it may or may not help in generating employment for the senior citizen.
8. Healthy Life Expectancy of India was found to be 59.6 years in 2014 (World Life Expectancy, 2017).
9. No data on Remaining Healthy Life Expectancy at 55 for India was found anywhere and therefore, that Indicator has not been taken in the final calculation of AAI.
10. No official or reliable data on National Median Equivalised Disposable Income for India was found. Therefore, an indirect method of calculating the ratio of person at-risk-of-poverty had to be made. For this paper, a person is considered to be at the risk of poverty if his average daily income is below 50% of the Median Daily Income of India, that is less than \$1.5 or Rs. 97.5 or per day (Rangarajan Committee, 2014).⁷
11. Physical activities under Domain 3.1 is meant to include Yoga and meditation too.

⁵ This is the national average as specific figures for Guwahati is not found.

⁶ This is the national figure as specific figures for Guwahati is not found.

⁷ As per the Rangarajan Committee Report, Poverty Threshold in India is Rs. 32 per day in Rural Area and Rs. 47 per day in urban areas.

Findings: The Result of the Computation

Aggregate Score- The aggregate score for Guwahati is estimated to be 31.1. For Men in Guwahati the cumulative score is 35.7. However, Guwahati fares poorly when it comes to aggregate score for Women with an aggregate of 22.1 points. This indicates the gender differences irrespective of age groups.

Employment- In respect of employment, the aggregate score is estimated to be 22.9. Men's Employment, score was estimated to be 36.9 while the same for Women was 6.5. Women employment has been decreasing across active working age group across India and therefore the result clearly reflects the expected trend for active non-working age group of women.

Participation- The participation score for the active ageing group in Guwahati is estimated to be 36.3. In case of Men the cumulative score was estimated to be 32.4 and for Women it was estimated to be 31.2. One of the primary reasons for this could be attributed to the fact that senior citizens are still found living in joint families with children and grandchildren instead of nuclear families. Family care and bonding are part of the societal structure still found strong across Guwahati. However, there is also a distinct trend of old age care homes emerging in Guwahati as nuclear families of old age people is rising.

Independent, Healthy and Secure Living- An important requirement for the ageing population is the healthy and secure life. However, Guwahati with a score of 39.1 shows that trying circumstances of the elderly and the senior citizens. A serious concern is reflected by the score for 'No Material Deprivation' which is 28.5 indicating that a large proportion of the elderly are materially deprived. The elderly also do not fare well in respect of Independent Living Arrangements with a score of 12.5. While living in joint family may ensure some safety, however, material deprivation is fairly high. Women are less fortunate than Men in this respect with a score of 30.9 vis-à-vis 41.4 for Men.

Capacity for Active Aging. Capacity for active ageing is influenced by factors like healthy life, life expectancy, educational attainment. However, the estimated scores for Guwahati was 32.3 which shows that the city is yet to find an environment where elderly have the capacity for active ageing. The 'Remaining Life Expectancy at 55 (not modified to 60)' score was estimated to be 30.8; and Educational Attainment score 25.3 which shows that elderly have limited scope of an active ageing. The score for Men is estimated to be 36.5 and the same for Women is 28.8 which shows that there is need to build upon environment both physical and social for enhancing the capacity of the elderly towards an active ageing.

Discussion

There is a huge gap between the indicators for men and women, and this difference showed clearly in their respective AAI score. Guwahati scored 36.9 in men's

employment but only 6.5 in women's employment. The condition of senior women is worse than men. It is deplorable and needs governmental intervention. There is a need to create employment opportunities for senior citizens, in general, and women in particular, to bring gender parity. It may be pointed out that Sweden, which leads the score, provides national retirement pension to every person, at the person's choice, from the age of 61, and yet the number of senior citizens who are working is only increasing with time (Swedish Centre, 2018).

The population of Sweden is ageing and Sweden is planning accordingly, by making gradual changes and making the workplace more senior-friendly. Housing schemes, food, etc. are also planned to be more accessible for senior citizens. As a result, their workforce of citizens, aged 65 to 74, grew 124% between 2005 to 2014. They have also raised their age of retirement from 60 to 64 and further allow them to continue to work if they prefer to do so. This not only increased the productivity of the nation but also reduced the burden on its expenditure on senior citizens.

Guwahati fared well in respect Participation. However, most of the participation is within the family life of the elderly. There is very little opportunity for elderly to engage in any organization whether governmental or non-governmental, which are specifically devoted to working for maximizing the participation of senior citizens in society. Voluntary participation of senior citizens may be experimentally started in various areas like nursing, Anganwadi Program, Information dissemination through public kiosks, assistance to other senior citizens, etc. Sweden has a very high rate of voluntary participation, which has been institutionalized. National Volunteering Agency (Volontärbyrå) is an institution, which helps people volunteer for activities based on their preference without requiring them to affiliate themselves with the institution (European Union, 2019).

In respect of healthy living too, the elderly populations have severe limitations in Guwahati. There is lack of open space for senior citizens for any physical activity to lead a healthy life. Parks, activity centre or senior-friendly gyms are rare and need to be initiated. Yoga is an equally effective and cost-friendly alternative, which may be encouraged among senior citizens.

Deprivation of special needs (medical) is another area of concern. Dentures, hearing aids, dialysis facilities, cataract surgeries, as well as medicines, supplements, spectacles, walking stick need to be provided at least at a subsidized rate. It may be mentioned that certain medical facilities like eye surgery are available free or at a highly subsidized rate in Gauhati Medical College.

The city also has limitations in respect of independent living opportunity for the elderly with a score of 3.3. However, this does not indicate absence of decision making power by the elderly in the family. The senior citizens graded their independence in decision making, a healthy 3.37 out of 5. On the other hand, most of the senior citizens have

been living with the families of their children, in a joint family set up, being cared for by their children or grandchildren, which is in consonance with the aims and objective of the Maintenance and Welfare of Parents and Senior citizens Act, 2007. However, the condition of the women and those who are totally dependent is found to be less fortunate as deprivation is much higher in those cases. This can be remedied either through, an all-inclusive retirement benefits policy or by enabling employment.

Though various pension schemes have been initiated, the existing policies target the working population and are, at present, not senior-friendly. Pension schemes are yet to make their presence noticeable in the private and unorganized sector. Atal Pension Scheme is a good scheme which may be made more effective and senior-friendly.

A matter of great concern is the size of the population of senior citizens who are the risk of poverty. About 42% of our senior citizens are at the risk of poverty. About 85% of the women senior citizens are at the risk of poverty. About 71.5% reported lack of basic requirements (living amenities). Many reported discrepancies in the implementation of the schemes, which added to the woes of the senior citizens. Senior citizens reported not receiving electricity supply or LED bulbs under the Saubhagya or Pradhan Mantri Sahaj Bijli Har Ghar Yojana. Many reported not receiving or other discrepancies in receiving subsidies under Ujjwala LPG schemes. The researcher feels that this is a problem with the implementation of the scheme, further aggravated by a lack of awareness about the schemes.

Safety of the senior citizens was found to be good. Most senior citizens consider their neighbourhood safe. However, safety is becoming a problem in Guwahati. Domestic violence is rare though increasing. However, many senior citizens reported lack of street-lights in their neighbourhood which would have made them feel much safer. Police Patrolling is also not done outside the main parts of Guwahati.

Life-long learning is another area where Guwahati lagged and is almost non-existent. Adult-literacy programs were not visible, schemes for basic skill development are not targeted towards senior citizens and similarly, distant learning programs are also targeted towards a different class of people. Lifelong learning is not considered relevant by most of the senior citizens as employment avenues for senior citizens are almost non-existent. The importance of education and skill development cannot be undermined. Education and awareness is the main foundation upon which everything else takes shape. A nation's development will only remain partial if a significant number of the senior citizens are left out of it.

With the passage of Right of Children to Free and Compulsory Education Act, 2009, . schemes like Skill India, the government has been focusing on the children and the youths however adult education and skill for the elderly is an emerging area in India which would require systematic intervention both from government as well as various agencies engaged in social welfare especially for women.

The average life expectancy is increasing with time and as stated earlier, India will sooner or later be reaching the stage where a significant population will consist of senior citizens. European nations have realized that and are planning accordingly. Unfortunately, there is no data on India for Healthy Life Expectancy at various stages of life. International Organizations like WHO maintain certain data like Healthy Life Expectancy at birth, cause of deaths, etc. but such systematic data, that is required for planning for ageing, is not available for India. There is a need to step up the process of data collection and periodic updation of crucial data, without which the planning becomes haphazard and unsystematic.

Mental conditions and ailments like depression etc. are neglected and considered to be a part and parcel of the ageing process. However, mental conditions are very important for enabling active ageing. Greater emphasis should be given to mental well-being. A significant population of the senior citizens are unhappy, depressed and feel incapacitated. This needs to be addressed. Psychological counselling and periodic evaluation of the mental health of senior citizens may be promoted through government hospitals, periodic camps, and clinics. There should be at least one psychological counsellor in every government hospitals.

There is scope for improving the coverage of ICT awareness in the state. The smart phones with their app based operations is a handy tool in hand where the seniors need active guidance which can facilitate easy execution of host of services without having to go out anywhere. He could know about the various schemes the government has for him, he can contact various officials, he can know the status of his application, ration card, passport, etc. The motto of the government, that is, 'minimum government and maximum governance' can only be achieved with more ICT awareness, especially among the weaker sections like women and senior citizens.

Social connectedness is much better in India and senior citizens are active through community and cultural forums. Senior citizens of Guwahati, unlike in many parts of the world, feels that their respect in the society has not decreased and have, on the contrary, gained more importance and status with old age. Only 15% of the senior citizens felt that their respect has diminished with age. About 79% of senior citizens feel solidarity with the younger generation. However, political participation is less. Only 32% of the senior citizens are active politically or within the community. Most of them who are active, are usually members of community prayer groups (Naam, Satra), cultural groups (local Bihu committee, etc.) or village level local administration. Some women are a part of local self-help groups and part of a concept called Matri-Gut, which are set up by public schools to monitor the administration of such schools.

However, none of the persons surveyed has written any letter to their political representative, nor have taken part part in any political protest or campaign in the preceding six months from the survey. Therefore, there is hardly any representation of the voices of the senior citizens at the policy-making level. There is a need to carry

their voice to the policymakers and therefore, a bridge between the subjects and the governments may be created through the creation of Senior Citizens' Forum in every village and district level, and integrated to State and National level Forum.

Three main hurdles for active ageing for the elderly in Guwahi are - Education and Awareness, Economic Dependency, and Health which are intricately linked to literacy. s. Better education leads to better awareness and employment. This in turn helps to live a decent life which contributes to a better lifestyle and health.

Lessons to be learned from Sweden

Senior citizens comprise about 20% of the Swedish population. Sweden is among the nations with the highest life expectancy, which is 81 years for men and 84 years for women. Though Sweden has privatized health care for senior citizens to some extent, about 75% of the senior citizens are taken care of, by the government. The Sweden Social Services Act, 1982 provide social support to everyone, like children, drug addicts, disabled and elderly (senior citizens), etc. The Act has been amended from time. Significant changes were brought after the Report of 'Commission on the Future' in 2013. Sweden had formed the 'Commission on the Future', in 2013, to identify and apprehend the challenges it will have to overcome in the near future. The commission highlighted the challenges posed by globalization and technological development, sustainable growth, demographic development, migration and integration, democracy and gender equalities and social cohesion. The commission observed that the prospect of the decline of population in gainful employment, due to population ageing, may widen the gap between the cost and revenue to maintain the standard of welfare services. Retirement of people not only meant a decrease in the working population but also increase in the cost of elderly care. It also meant a need for trained persons with the necessary skills to render such care. Under such a scenario, the growing demand for care will put a lot of pressure on the funding of welfare services. Migration from rural to urban areas may further widen the disparity in services in rural and urban areas. Prospects, conditions, and challenges will differ vastly from municipality to municipality and affect the principle of equal access to services throughout the nation (PMO Sweden, 2013).

Every citizen of Sweden is guaranteed to a reasonable standard of living. The services are optional, that is based on the free choice of the individual who would like avail such services. The services are statutorily required to be of high quality and carried out by trained professionals. The municipal authorities are responsible to carry out the policies under the Act. The beneficiary may make complaints to the municipal authorities if he or she is not satisfied with the services, and even appeal to the County Administrative court against a decision of the municipal authorities. Services or support includes reasonable costs for food, clothes, recreation, consumables, health, hygiene, and other facilities like newspapers, telephone, and television. It also covers accommodation, electricity, insurance and membership of trade unions, etc. The standards of cost are

revised every year based on a national standard (riksnorm). However, such support is not granted to persons who are fit to work or have resources to maintain one's self. The Social Services run special schemes for employment and skill-enhancement for the people who can work. The law provides social security to senior citizens intending to enable them to live an active and influential life, maintain security and independence, respect, and access to quality care. Services for senior citizens include Homecare, like household duties, cleaning, laundry, shopping, etc., and Personal care includes assistance in eating, dressing, moving around, etc. Day-care services are also provided. Senior citizens who need extensive care can opt for sheltered housing services with an option to transfer to any municipality of their choice. All such services are free for persons without any resources or with a certain fee for those who can afford it. The act provides support to persons who render support to the senior citizens, in the form of financial support to people caring for relatives. Sweden has special housing schemes to meet the needs of senior citizens and disabled persons. It prefers to give health care in the house of the person rather than in a hospital. Such care is provided through trained, efficient and multi-professional persons. It not only provides communal meals but also, ready-cooked meals at the home of the senior citizens.

Sweden runs specially designed taxi services for the senior citizens and the disabled. The facilities are not only available to citizens within the nation but also citizens who live outside the country. Sweden has a universal National Retirement Pension, funded from the taxes, and can be opted by its citizen at the age between 61 to 64. The National Retirement Pension consists of Income Pension, Premium Pension, and Guarantee Pension. Though the pension is based upon the taxed income of the person, persons with low-income pension may get the guaranteed pension. Besides, the national pension, they may also get an occupational pension based on the contributions made by their employers. The country has also introduced many preventive health care innovations like medical prescriptions of physical activities (exercises), stimulation through music, movies, etc., cautionary measures against injuries from fall, etc. Sweden may be the nation with the highest tax but the tax is utilized for providing a balance between work and life within society. It is based upon the principle of 'equal access to facilities for all'. Besides the support mentioned above, social support includes support for expectant mothers, paid parental leave, gender equality, monthly allowances for children up to the age of 16, free schooling, almost free health care (including dental care), free public transport, etc.

The results can be seen in the Active Aging Index. Sweden has become the best nation for senior citizens. It is well ahead of larger economies like U.K, France, and Germany in the Active Ageing Index and ahead of economies like the USA and China in other Aging and Living Indices. Sweden has managed to bring gender parity to a gender gap of -2.2 points only. It tops the list in Active Ageing Index for men's as well as women's employment with a gender gap of -7.2 points. The gender gap is positive (1.0) in Participation, which means the participation of women is higher than men. It is also positive for Independent Living (0.9), and Capacity for Aging (0.8).

Conclusion

The Active Ageing Index reflects scenario of the life of the ageing population of Guwahati. One of the basic requirement for any policy is data base, and there is need for developing appropriate data base for the seniors and the ageing population in the state. The absence of periodic data on the condition of the senior citizens is of utmost necessity for understanding the quality of life of the elderly in the State. Despite, the paucity of data, the present study has been able to highlight the areas that need legal intervention in the State. Adopting the Active Ageing Index or creation of a similar data analyzing tool would be the first step in identifying the areas that need attention, and thereby the corresponding law of the existing legal framework which needs modification.

However, further study as to the causes for its poor performance (cause-effect analysis) would be required before suitable modification into the law may be made. A study of the corresponding laws and its implementation in nations like Sweden may also help in creation or modification of our local laws. Therefore, adoption of an ageing index has not only become necessary but such periodic collection of data may be the only objective way for appraisal of the performance of a legal system and its constant updation so that the goals of such laws are achieved. Therefore, 'piece-meal legislation and schemes and the gaps in its implementation often fall short of addressing the issues of senior citizens in India.

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Appendix

Employment (Total)	1.1 Emp. rate 55-59	1.2 Emp. rate 60-64	1.3 Emp. rate 65-69	1.4 Emp. rate 70-74	2016 AAI	Gender Gap
Place	LFS-2014	LFS-2014	LFS-2014	LFS-2014	Value	Points
Guwahati	49.90	41.70	0.00	0.00	22.90	
Men	76.22	71.40	0.00	0.00	36.91	-30.39
Women	26.08	0.00	0.00	0.00	6.52	
Weight						
	W1	W2	W3	W4	Sum	
	25	25	25	25	100	

Participation in society (TOTAL)	2.1 Voluntary activities	2.2 Care to children, grand children	2.3 Care to older adults	2.4 Political participation	2016 AAI	Gender Gap
Place	EQLS-2016	EQLS-2016a	EQLS-2016b	EQLS-2016	Value	Points
Guwahati	28.80	47.80	35.50	32.50	36.30	
Men	36.60	42.00	15.00	41.30	32.41	-1.19
Women	17.60	48.80	35.00	20.60	31.22	
Weight						
	W1	W2	W3	W4	Sum	
	25	25	30	20	100	

Independent, Healthy & Secure Living	3.1 Physical Exercise	3.2 No Unmet Needs of Health & Dental Care	3.3 Independent Living Arrangements	3.4 Relative Median Income	3.5 No Poverty Risk	3.6 No severe material deprivation	3.7 Physical safety	3.8 Lifelong learning	2016 AAI	Gender Gap
Place	EQLS-2016	SILC-2014	SILC-2014	SILC-2014a	SILC-2014	SILC-2014	ESS-2014b	LFS-2014	Value	Points
Guwahati	25.50	65.70	12.50	55.30	57.10	28.50	67.80	0.00	39.06	
Men	8.10	76.60	1.30	72.50	71.10	37.90	68.80	0.00	41.42	-10.54
Women	8.50	70.30	4.20	38.50	30.30	15.20	67.30	0.00	30.88	
Weight										
	W1	W2	W3	W4	W5	W6	W7	W8	Sum	
	10	20	20	10	10	10	10	10	100	

Capacity and enabling environment for active ageing (TOTAL)	4.1 RLE achievement of 50 years at age 55	4.2 Share of healthy life years in the RLE at age 55	4.3 Mental well-being	4.4 Use of ICT	4.5 Social connectedness	4.6 Educational attainment	2016 AAI	Gender Gap
Place	EHLEIS 2014	EHLEIS 2014	EQLS-2016	ICT Survey 2014	ESS-2014a	LFS-2014	Value	Points
Guwahati	30.80		59.30	12.50	73.30	23.30	32.31	
Men	32.60		63.20	19.60	74.90	56.40	36.45	-7.67
Women	29.20		53.84	2.80	70.90	6.50	28.78	
Weight								
	W1	W2	W3	W4	W5	W6	Sum	
	33.33	23.33	16.67	6.67	13.33	6.67	100.00	

Total	Indices				2016 AAI	Gender Gap
Place	Emp	Soc	Liv	Cap	Value	Points
Guwahati	22.90	36.30	39.06	32.31	31.09	
Men	36.91	32.41	41.42	36.45	35.69	-13.64
Women	6.52	31.22	30.88	28.78	22.05	
Weight						
	Emp	Soc	Liv	Cap	Sum	
	35	35	10	20	100	

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