



Gerontological Happiness through Micro Enterprise Development in India

Dolon Mukherjee^{1*} and A.K. Nandi²

1. Research Scholar, Life-long learning & Extension, University of Visva-Bharati, Birbhum, WB, India; **ORCID Id** <https://orcid.org/0000-0002-0396-1910>
Linked In <https://www.linkedin.com/in/dolon-mukherjee-b577682b>

*E-Mail: dol4indmuk@gmail.com

2. Professor, Dept. of Agricultural Economics, BCKV, Mohanpur, Nadia, West Bengal-741252

Abstract

Ever increasing elder population is mounting pressure on various socio-economic arena including pension outlays, health care expenditures and savings levels both in organised and unorganised sectors. Approximately 93% or more of these are from rural unorganised sectors and dependent on family members regarding various facets of life. This dependency is an outcome of limited physical ability and degrading health condition, but this situation may overcome with the help of action mode micro enterprise project planning, based on available rural resources of low capital requirements, forming the elder self-help groups to uplift the socio-economic conditions of the elder people.

For the present study, five districts (East & West Medinipur, Purulia, Cooch Behar and Hooghly) have been purposively covered. Fifty respondents were from each district on twenty available agriculture & allied options of livelihoods identified as elder friendly as well as low investment production opportunities during 2016-17 agricultural year.

Amongst above, Vermicomposting is being focussed as an input which also helps sustainable organic agriculture for maintaining soil, plant and water qualities. Under this situation, elderly who are the most vulnerable section in the society can produce absolute organic vermicompost that can provide employment generation in one hand and on the other side it requires lesser physical movements that can be incorporated into usual daily chores.

To judge the Economic viability of the project, the project appraisal techniques like B-C ratio, Net Present Value (NPV), Financial Rate of Return (FRR) have been done apart from the technical feasibility and here also it proved the competency of credit repayments. Financial security of self-dependency of the rural marginal elderly and female can be achieved through rural level microenterprises, which is less capital invasive and high in return. Agripreneurship development as announced by the governments for the youths, which leads also the 'head is held high' particularly for the elders.

Key Words:

Old age person, income generating activities, self-help groups



1. Introduction

The final part of the journey in life is the problems associated with ageing and it is an inevitable phase of every person. In earlier days, elderly persons were given special respect with high position in society as because of their experience and wisdom but such values have been totally changed with the advancement of civilisation in accord with science & technological revolutions. Old values have gone and new ideas have taken their place, changing the face of the society in a radical way. With the raising level of life expectancy due to the advancement of scientific and medical method, old age has been a matter of radical critical concern in every country. With population ageing, countries face problems of financial insecurity and health issues of the elderly; added to this are the psychosocial problems that emanate from loneliness, emptiness, depression and despair of being away from the family. These problems are most significant factors all over the world among the elders.

According to the United Nations, the world population is expected to increase to 9.8 billion by 2050 from the current 733 million and the proportion of the elderly population is expected to increase from 13.4 % to 21.7 % (LASI,2020). In the last few years, the elderly population is branded as ‘non-productive’ and it causes immense harm because they are thought to be burden on the country’s economy and affecting it adversely. It is indeed a matter of concern because we should convince ourselves that they are also an important part of the society. They are considered not as a torch bearer of wisdom but an unfortunate burden of society.

The population has been experiencing significant greying and about two-thirds of world’s elderly persons live in developing countries. As per UN projections (2017), the elderly persons will be increasingly concentrated in less developed regions of the world and in 2050, about 8 out of 10 world’s elderly persons are expected to live in developing regions. Policy changes for institutional readiness are required to cope with disproportionate needs for livelihood security. With the help of International Institute of Population Sciences (IIPS, 2020) Indian government has entrusted more on the national programme for health care elderly(NPHCE).

Population ageing had started earlier in the more developed regions and was beginning to take place in some developing countries. Along with the rapid greying of world population different psycho-social, physical, health and livelihood related problems of aged people are



also growing. In this regard present policy goal of both developing and developed countries should be to use its greying purposefully not only in its economy but also for the sake of aged people indeed. Ageing has profound consequences on a broad range of economic, political and social processes. In India, 26 % of older men and around 60 % of older women do not have any personal income. Therefore, the priority is to promote well-being of the growing number of older persons towards the income security particularly for the unorganised rural sectors. Considering the above phenomenon, the present study aims with following Objectives: i) present status of elder people of our country; ii) identification of important sectors where elder people are engaged at present; iii) to judge the techno-economic and social viability of suitable elder friendly action mode project, and iv) policy suggestions for the happiness of elders in rural areas.

2. Method and concepts adopted

For the present study, five districts (East & West Midnapore, Hooghly, Purulia & Coochbehar) have been selected as a domain based on high and low intensity of agriculture and economic development. From this domain twenty possible micro enterprises have been chosen where the elders are working at ease with physical and acquired skills during their productive age (16-59).

Likert type (Kothari, 1987) five-point scale has been used for each micro enterprises with sample respondent of fifty for each to compare the priority of elder friendly low investment enterprises during 2015-16 agricultural year with pre tested schedule both qualitative and quantitative nature of information. The Likert Scale is a psychometric scale commonly involved in research that employs questionnaires. It is the most widely used approach to scaling responses in survey research, such that the term is often used interchangeably with rating scale, although there are other types of rating scales. How the income of the elder persons can be enhanced those who have worked in low surplus unorganised rural sectors? To overcome this problem, one common eco-friendly need based vermicompost project is being focused as a bankable form with detailed methodological background. The project appraisal technique (Gittenjer, 1974) has been used considering the time value of money for durability of investment and benefit over a series for examining the financial viability of one selected enterprise (Vermicompost). Three discounted measures of project worth are used here, for the comparison of benefit in relation to cost. These are being calculated to



judge whether the project is viable or not. Rate of discount (Opportunity cost of Capital) has been selected at 10 % as closer to the normal interest funded by the commercial banks.

2.1. Discounted Measures of a Project Worth:

Considering the time value of money different discounted measures of project worth have been considered for this present study.

2.2. Benefit-Cost (B:C) ratio:

It is the ratio between the total cost and the total return of a project. It is an easy and popular method of judging the economic viability of a project. Implication of the analysis is that how much amount of benefit received per unit investment of money over the entire time frame of project. Here, lifetime has been considered as 10 years & opportunity cost is 10 % annum⁻¹.

B:C ratio= Present Worth of Benefits/ Present worth of Costs

$$= \sum B_t / (1+i)^t / \sum C_t / (1+i)^t$$

C_t = Cost in year. B_t = Benefit in the t^{th} year, i = Rate of discount, t = number of years.

B-C ratio >1; the project is economically viable and acceptable.

B-C ratio <1; the project is not economically viable and acceptable.

B- C ratio =1; it can't be judged; the decision rule totally depends upon the entrepreneurs. Here intangible benefits from the project have been judged to make the decision.

2.3. Net Present worth (NPW):

It is simply the present worth of the net returns of a project discounted at the opportunity cost of capital. It is calculated to know how much one is justified in investing today to receive a stream of income at a future date.

NPW = Present worth of benefit - Present worth of cost

$$= \sum B_t / (1+i)^t - \sum C_t / (1+i)^t$$



C_t = Cost in year, B_t = Return in the t^{th} year, i = Rate of discount, t = number of years.

2.4. Financial Rate of Return (FRR):

FRR is that discount rate (i) such that present worth of benefit equals to present worth of cost. This discount rate represents the average earning power of money (Yield Rate/IRR) per annum over the investments. Where, Present worth of benefits - Present worth of costs = 0.

i.e. $\sum Rt / (1+i)^t - \sum Ct / (1+i)^t = 0$; FRR is determined by trial and error method with hypothetical discounting rate until a negative net present worth.

FRR = Lower discount rate + Difference between the two discount rates X (Present worth of cash flows at lower discount rate / Absolute difference between the present worth of the cash flow streams at the two discount rates.)

2.5. Annuity factor:

It means how much one received or paid annually is worth today. This factor enables determination of the present worth of a constant amount received each year for some length of time in the future, i.e. $a_n = (1-v^n) / I$, Where, a_n = present worth of an amount of one at the end of term. v^n = discount factor for n^{th} year.

3. Result & Discussions:

Considering the objectives of this study, findings have been categorised with four sections: Section I deals with the present scenarios of aging population as well as the working arenas, Section II deals with elder friendly small and micro enterprises where they are at present working either as individual or as groups, efforts recorded with their perceptions of thinking priorities, Section III examined the methodology in the context of financial viability of a popular enterprises in rural areas so that the financial institutions may extend their cooperation to the elder self-help groups in rural & semi urban areas, and *finally in Section IV* advocated the policy suggestions for concentration on the micro enterprise development in the rural and semi urban areas based on their acquired skill during their principal working age.



3.1. Section I(Present status of Aging population in India)

This section deals with the present status of aging population in our country. In India, the proportion of the elderly has raised from 5.63 % in 1961 to 8.3 % in 2012. Figures cannot be generalized across States. The proportionate number of the elderly in Kerala is 13 % and 10.8 % in Tamil Nadu, against 4 % in less progressive States.

In a developing nation like India, with the majority of its population aged 30 or less, the focus of national policy is perforce directed to the basic developmental needs and welfare of children, adolescents and young adults. The problems and issues of its greying population occupy the back-seat. However, with such a high population it is not possible to overlook the situation of greying by the policy makers of this country.

Among the major states, West Bengal had the highest proportion of widows (65.1%) followed by Karnataka (63.2%), Andhra Pradesh (63.1%), Tamil Nadu (60.3%) and Orissa (60.2%). Overall, Pondicherry had the highest proportion of widows (67.7%). On the other hand, states with a low proportion of widows are Nagaland (24.5), Sikkim (32.1), Haryana (36.5), Mizoram (38.7) and Punjab (39.5). A range of demographic, economic, health and socio-cultural factors affects these people.

The inter-state variations in population ageing in Kerala and Tamil Nadu projected to have 18 % and 17 % of elders respectively in by 2026 (followed closely by Himachal Pradesh, Punjab, Karnataka, West Bengal and Andhra Pradesh) indicate that issues such as economic dependency and elder care are much more pressing in certain states than others. (Data source: Census 2011)

Table 1: Percentage of 60 plus Population across States in India,2011.

Range of Percentage	States
6.1 – 8.0	Assam (6.5), Delhi (6.5), Jharkhand (7.1), Madhya Pradesh (7.1), Uttar Pradesh (7.1), Bihar (7.2), Rajasthan (7.3), NE states (7.3), Haryana (7.6), J&K (7.7), Chhattisgarh (7.9).
8.1 -10.0	India (8.3), Gujarat (8.4), Uttarakhand (8.5), West Bengal (8.5), Maharashtra (9.0), Odisha (9.0), Andhra Pradesh (9.1), Karnataka (9.2), Punjab (9.7).
Above 10.0	Himachal Pradesh (10.3), Tamil Nadu (11.2), Kerala (12.3).

Fig.1: States with concentration of elderly population

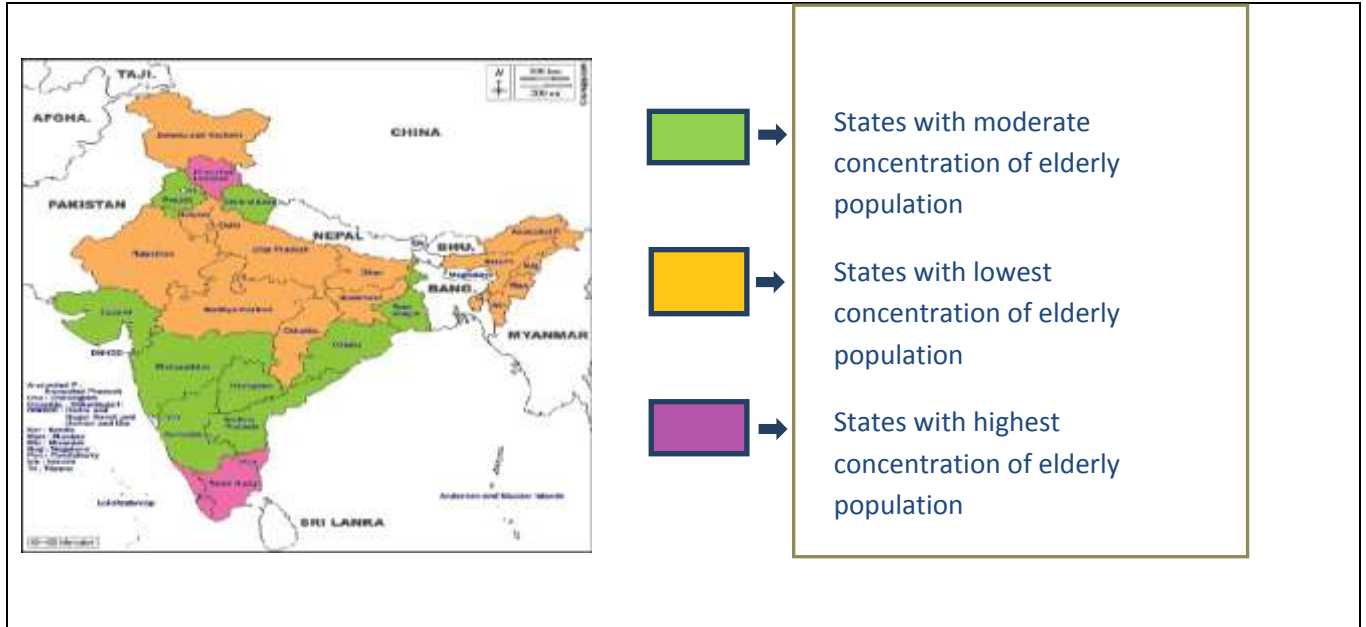


Table: 2: Projections of Population and percentage of Older Persons in India up to 2051

Group	1961	2001	2011	2021	2031	2041	2051
60+	25 (5.6)	77 (7.5)	98 (8.1)	132 (9.7)	184 (12.1)	233 (14.0)	298 (16.6)
70+	9 (2.0)	29 (2.9)	43 (3.6)	52 (3.8)	75 (4.9)	104 (6.3)	131(7.3)
80+	2 (0.6)	8 (0.8)	11 (0.9)	16 (1.2)	20 (1.3)	29 (1.7)	41(2.30)

- Figures within the parenthesis indicate the respective %ages.

3.2. Section II (Identification of need-based activities)

Objective of this section is to identify the elder friendly rural need based micro enterprise development for maintaining the livelihoods, which is the prime thrust for the happiness to income security for an independent or group of senior citizens. For analytical purposes the available elders those who are working in an enterprise have been interrogated as a separate group of each enterprise with fifty in number and ranked following Likert type five-point scale.



Table 3:Livelihood Ranking

Sr. No.	Name of the likelihood	People' choice*	Ease to develop skill*	Ease to implement*	Total Score	Rank
1	Backyard Poultry	223	225	243	691	1
2	Spawn Prdn.	221	220	202	643	5
3	Mushroom Prdn(yster)	213	221	217	651	3
4	Puffed Rice	234	222	182	638	9
5	Goatery	249	221	188	658	2
6	Fish Net	190	213	189	592	17
7	Matt Weaving	201	234	197	632	10
8	Nursery	222	223	182	627	12
9	Nutrition Garden	200	221	206	627	12
10	IFS	221	219	202	642	6
11	Vermicompost	213	221	216	650	4
12	Duckery	234	223	182	639	8
13	Fish Feed Prdn.	209	221	166	596	14
14	Liquid Organic Manure	190	212	188	590	16
15	Rope making (machine)	210	234	197	641	7
16	OrganicVegetableprdn.	231	221	166	618	13
17	Fruits Preservation	190	212	189	591	17
18	OrganicAg.input Seed Prdn	201	234	195	630	11
19	Scientific Fishery	191	210	198	599	15
20	Solar led egg hatching	100	233	235	568	19

IFS= Integrated Farming System. *Scores were based on Likert type Five-point scale; N=50 from five location; Max.Score=250, Min. Score=50

The results have been summarised with score and rankings for twenty enterprises in the Table-2based on certain criteria information received from the studied region. From the above table three livelihood enterprises were topped the first three place e.g.-Backyard poultry, Goatery and Oyster mushroom cultivation.

From the perception of the engaged respondents, one may safely conclude that both crop and animal husbandry enterprises are familiar and may be adopted based on available natural



resources in rural areas and it also create employment side by side enhances the low-cost sustainable input use in rural areas production system and nutritional requirements.

3.3. Section III (Methodological aspect for Economic Viability of Small Enterprises)

This section deals with how far, the small and marginal enterprises are economically viable enterprises so that the elder self-help groups (ESHGs) may submit the loanable proposal to the financial institutions as because in rural areas the surplus amount for self-financing are abnormally lower level than urban areas. Apart from that in a labour surplus economy, the ageing people failed to access the credit and scope to engage in employment generative activities from other private sources. To highlight the methodological aspect of financial viability of such enterprises, one case study on *vermicompost* has incorporated with the help of project appraisal techniques.

Estimate for construction of temporary shed for setting up 200 TPA (tonnes per annum)

Vermicompost unit (Size 8 m x 15m x 5.4 m)

3.4.1. Machinery / tools Cost:

Sl.No.	Particulars of item	Amount (Rs.)
1	Shovels, spades, crowbars, iron baskets, dung fork, buckets, bamboo baskets, trowel, wire mesh sieves (3 mm and 6 mm)	2800
2	Plumbing and fitting tools	1000
3	Power operated shredder	20000
4	Sieving machine with 3 wire mesh sieves 0.6 m x 0.9 m size - power operated without motor	35000
5	Weighing scale (100 kg capacity)	1500
6	Weighing machine (platform type)	5000
7	Bag closer	3000
8	Empty barrels (200 L capacity) 4 Nos.	1600
9	Culture trays (plastic) (35 cm x 45 cm) - 4 Nos	200
10	Wheel barrows - 2 Nos.	10000
	Total	80100
		Say 80000



3.4.2. Operational Cost:

Total operational cost for one cycle of 75 days

Bed volume 330 m³ Recovery %: 30%

Sl.No.	Particulars	Unit	Rate	Amount (Rs.)
1	Agricultural waster @ 320 kg per m ³	105.6 ton	100	10560
2	Cow dung @ 80 kg/m ³	26.4 ton	150	3960
3	Worms @ 350 per m ³ 500 worms per kg	231 kg	50	11550
4	Formation of vermin bed with agro-waste, cow dung and worms	330 m ³	46	15180
5	Harvesting, sieving, packing, etc., including cost of bags	40 ton	0.45	18000
6	Electrical charges for pump, machinery, lighting etc.	-	-	4800
7	Repair and maintenance	-	-	7950
	Total			72000
	Cost for 5 cycles			360000
	Rent on lease @Rs 8000/year			8000
	Total operating cost			3,68,000

3.4.3. Total Cost:

	Particulars	(Rs.in lakhs)		Total Returns		
		Years		Particulars	Years	
	<i>COSTS</i>	I	II to X	<i>BENEFITS</i>	I	II to X
A	Capital Cost					
i)	Buildings	1.32	-			
ii)	Machinery / tools	0.8	-			
iii)	Water supply system	0.6	-	Sale of vermicompost	3.00	4.50
iv)	NADEP tanks	0.05	-	Sale of worms		0.45
B	Operational cost	3.68	3.68	Consultancy and extension services		0.10
	Total Cost	6.45	3.68	Total benefit	3.00	5.05



Table4. Estimation of discounted measures of Vermicompost project during-2016-17.

Year	Total Cost	Total Return	DF @10	DC @10	DR @10	DF @ 35%	DC @ 35%	DR @ 35%	DF @ 40%	DC @ 40%	DR @ 40%
I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
1	645000	300000	0.909	586305	272700	0.741	477778	222222	0.714	460714	214286
2	368000	505000	0.826	303968	417130	0.549	201920	277092	0.510	187755	257653
3	368000	505000	0.751	276368	369255	0.406	149571	205253	0.364	134111	184038
4	368000	505000	0.683	251344	344915	0.301	110793	152039	0.260	95793	131456
5	368000	505000	0.620	228160	313100	0.223	82069	112622	0.186	68424	93897
6	368000	505000	0.564	207552	284820	0.165	60792	83424	0.133	48874	67069
7	368000	505000	0.513	188784	259065	0.122	45031	61795	0.095	34910	47907
8	368000	505000	0.466	171488	235330	0.091	33356	45774	0.068	24936	34219
9	368000	505000	0.424	156032	214120	0.067	24708	33907	0.048	17811	24442
10	368000	505000	0.386	142048	194930	0.050	18302	25116	0.035	12722	17459
Total				251204	290536		120432	1219245		108605	1072425
				9	5		1			1	

3.4.4. Benefits-Costs Ratio-

B/C Ratio= Rs. (4845000/3957000) =1.22, which is greater than 1.

Therefore, the project is economically viable and the elder self-help groups have gained additional 0.22 rupees per unit rupee of investments.

Net present value (NPV): NPV at the 10% discount rate (Opportunity cost of Capital)

Net present value (NPV) =Rs. (2905365 – 2512049) =Rs. 393316/-

3.4.5. FRR calculation:

Now we have to consider the discount rate higher than 10% to make the net present worth positive. Suppose the rate of interest is 35%. Now at this interest the discounted cost and benefit calculation will be-

So, at 35% discounting rate the NPV(Positive)=(1219245-1204321) = (+14924).

So, at 40% discounting rate the NPV(Negative) (= (1072425-1086051) = (-13626).



FRR= lower discount rate+ difference between the two-discount rate/absolute difference between the NPW of cash flow streams at two discount rates.

= $35 + 5(14924/28550) = 35 + 2.61 = 37.61\%$. Therefore, the yield rate of the present investment on vermicompost is at 37.61 % annual basis. If, the group invested the amount from the help of financial institutions @ 10 %, then they can earn a margin of 27.61 % per year.

3.4.6. Annual Constant Flow:

3.4.6.1. Annuity Factor Calculation:

The formula for calculating the annuity factor n years @r % deflation is $= [1 - \{1 - (1+r)^{-n}\}] / r$

The calculated annuity factor @ 10% for 10 years is = 6.14

3.4.6.2. Annual Constant flow for Vermicompost:

The NPW of the vermicompost project at the end of 10 years @10 % is Rs.393316

Thus, the annual constant flow of the project is = $393316 / 6.14 = \text{Rs. } 64058$ per annum apart from the wages earned from the project.

3.4. Section IV (Policy Recommendation)

In India, research on health and long-term care in old age is not extensive. Indian Council of Medical Research (ICMR) started funding on ageing in the year of 1985-86. In rural areas of Tamil Nadu, a Task Force Project was initiated specifically to find out problems of health of older persons. The National Policy on Older Persons (NPOP, 1999) has formulated the vision of increased income security, health & nutrition, shelter, education, empowerment & welfare, before Madrid International Plan of Action on ageing (MIPAA, 2001) sponsored by United Nations. Based on our constitutional bindings (Article 41-42) and Directive Principles social assistance programme have been continuing long before for the poor and marginalised persons. Primarily, Vienna International Plan of Action on Aging (1982) started the problems and as a follow up action (1991), 18 principles have been demarcated for the older persons of which grouped into five quality of life attributes such as: independence, participation, care, self-fulfilment and dignity.

For effective maintenance and welfare of parents and senior citizens, the Government of India enacted Maintenance Act in 2007. In Millennium Development Goals and later in Sustainable Development goals (2015) the emphasis vested for the indicators in national level



which thoroughly discussed in UN General assembly (2016) regarding the action taken by the different nations regarding the discrimination of older women and the implications on economy. With the help of United Nations Population fund (UNPF), a large-scale survey has been carried out in seven states for Building Knowledge Base on Population Aging in India (BKPAI).

From the five broad principles of UN for older persons (UNFPA, 2017) the independence criteria is prime thrust areas where the older persons should have the opportunity to work or to have access to other income generating opportunities. Considering the above approaches, Government of India suggested that the State alone are not able to overcome the challenges and it needs individuals, families, community, civil society organisation in collaboration with public and private institutions.

MIPAA (2001) also pointed out for strengthening the capacity of families, particularly for effective bonding between young and old in a society without discriminating the widowhood in the society. Nineteen departments of our country are now engaged for streamlining the older through various schemes particularly for the geriatric care from medical and paramedical Institutions linking with national and international NGOs.

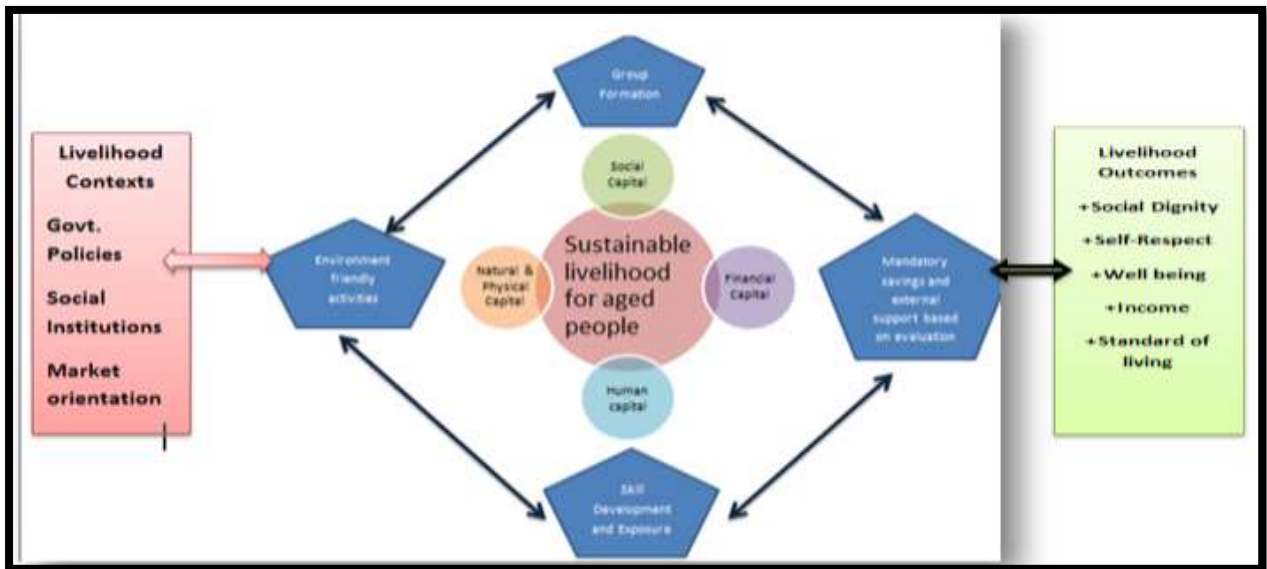
In India, a little more than one-third (36%) of the elderly age 60 and above are currently working. The proportion of the elderly age 60 and above who are currently working is higher in rural areas (40%) than in urban areas (20%). Gender differences are notable in the current work status of elderly age 60 and above, 50% of men compared with 22% of women are currently working. By caste, the proportion of elderly age 60 and above currently working is the highest among the Scheduled tribe (48%), followed by the Scheduled caste (40%) and other backward classes (37%); and the proportion is lowest among those belonging to none of these caste/class groups (GoI, 2011). Therefore, elder friendly micro enterprise project have to develop for income generating activities forming the elder self-help groups. For the livelihood development, some of the NGOs have already started the following model in rural areas. In a report, HelpAge India (<http://www.hepageindia.org/>) followed more or less same type of model in different centres using the CSR funds in some locations.

3.4.1. Livelihood Framework for aged people

This livelihoods framework is a tool to improve the understanding of livelihoods, particularly for the poor elders in self- help arena. They are not only vulnerable to social, economic and

physical capital but also susceptible to any sudden changes in the society or in the environment they are living in. Keeping this on mind the following ESHG livelihood models can justify their present and future position as well as will help them to help themselves for development of micro enterprises in rural areas both for the crop and livestock developments.

Fig-2: Livelihood Strategy



Exclusive senior citizen groups may be formed and special works which require lesser physical effort identified and allotted to these groups are essential works from the part of financial and social organisations. In this aspect, technically equipped retired persons may be included in elder groups for the development of bankable project in the rural and sub urban areas.

The Government of India also initiated different schemes for the senior citizens integrating the different departments particularly for the health care, income; Oldage pensions and movements from one place to others are listed in table 5.



Table: 5 Scheme available for the Ageing people in India.

Sl	Sectors	Available schemes	Funded by
1	Health	<i>RastriyaVayoshriYojna</i> - provides a living aid & physical devices of assisted living for the citizens (BPL category).	Central Govt.
2	Income/Livelihoods/Pension	<i>PradhanMantriVayaVandanaYojana</i> (PMVVY) Policy's term 10 years and the minimum & maximum pension amount is Rs. 3000/- & Rs. 10,000/-. It can also earn interest rate @8%. The pensioner can choose the frequency of the payments Above	LICI
3	Pension	<i>Varishta Pension BimaYojana</i> -provides annuity payouts like immediate Annuity plan, Above 60 yrs.	LICI
4	Health	National Programme for the Health Care of the Elderly- Provide free/Subsidized preventive & promote care through	GoI.
5	Health	<i>VaristhaMedicclaim Policy</i> -covers the charges of medicine, ambulance, blood & various other diagnostic services. 60-80/	National Insurance
6	Pension	IGNOAPS–INDIRA GANDHI NATIONAL OLD AGE PENSION SCHEME-entitled to a monthly pension scheme,	Ministry of Rural Dev.
7	Emergency need	Sr. Citizens Welfare Fund-who do not have any means to sustain themselves, The main objective of this scheme is to provide financial assistance and old age pensions to senior	Ministry of Social Justice &
8	Pension	National Pension System- Voluntary contribution-based pension scheme- provides a host of benefits to the subscribers	NPS Trust
9	Mediclaime	<i>Ayushman Bharat PradhanMantri Jan ArogyaYojana</i> - national health insurance scheme of the state- provide free access to healthcare for low-income earners. 16-59 years (conditional).	GoI. Min. of Health and Family Welfare

4. Conclusion

The pressures on ageing people on economy are mounting day by day throughout the World. Lack of organized efforts in developing economy enhances the problems both productive and non-productive sectors. Agriculture is unorganized and dominant sector with low value



surpluses which is the only employment generative production system deals with hard physical labour in rural areas. Therefore, the ageing people may be survived through production of inputs, processing of outputs value addition ready consumable goods, packaging in marketing, animal farming and non-farm cottage industries, etc.; forming the elder self-helpgroups (ESHGs) linking with financial institutions for initial credit requirements. Considering the time value of money project appraisal techniques (discounted B/C ratio, NPV, FRR and annual constant flow of return) have to be worked out as a part of bankable project for credit requirement as well as projection of economic viability. The sited example of vermiculture yielded 37 % of financial rate of return to repay the credits with sufficient surplus apart from employment generations. Local Self Government, Voluntary Organisations, NGOs as well as the officials of financial institutions may take prime initiatives to organise the ESHG for the micro enterprise development for overcoming the social security problems towards a harmonious society in the rural communities.

GNH research in Bhutan (2016) studied nine different domains that contribute to a person's happiness; like, i) Living standards, ii) Health, iii) Education, iv). Good governance, v) Ecological diversity vi) Time use, vii) Psychological wellbeing, viii) Cultural diversity & resilience and lastly ix) Community vitality. But only the income and material comforts is the prime factor for happiness in most of the developing countries.

5. Further Research: Study on Social Gerontology is scanty in Indian socioeconomic condition. In medical sciences such problems are confined only on disease related aspects. But the happiness depends on so many parameters of which social and economic are prime aspects in developing countries. The action mode research required on utilization of acquired knowledge with due prestige, dedicated health facilities maintaining the data base of causal relationships and over all, the mind set of other sections.

6. Acknowledgement: This manuscript was prepared for better understanding on elderly in our country and to develop the mode of actions so that after crossing major part of life, they can able to live with their prestige in the society. We deeply acknowledge the respondents for their activesupports. Research conducted from our end not with any financial assistance but with a respect to our elders.



7.References:

Anandajaysekharan, P. C., Van, Rooyan, Libenberg, J. F., 2004. Agricultural Project Planning and Analysis: A Source Book, IFPRI,59-62.

Gittinger, J. P., 1972. Economic Analysis of Agricultural Projects, Johns Hopkins University Press, Baltimore and London, 99-101.

Government of India, 2011. Situation Analysis of Elderly in India, Ministry of Statistics & Programme Implementation, 10-21.

GNH Survey Report, 2016. A Compass towards a just and Harmonious Society, Centre for Bhutan Studies & GNH Research, 1-2.

Kothari, C.R., 1987. Research Methodology, Wiley Eastern Limited, 120-123.

MIPAA, 2001. The Madrid International Plan of Action on Ageing, UN Second World Assembly on Ageing, Madrid, 2001(www.un.org/en/events/pastevents/pdf.Madrid_plan.pdf).

NPHCE, 2020. Longitudinal Ageing Study in India (LASI), Wave-I, India Report, IIPS, Mumbai, Ministry of Health & Family Welfare, Government of India, (<https://www.iipsindia.ac.in/lasi/>).

Rao, A.V., 1990. Health Care of Rural Aged. New Delhi, ICMR

UNFPA, 2017. 'Caring for our Elders, Early Responses'- India Ageing Report-2017. United Nations Population Fund, New Delhi, India, 11, 36-46.

United Nations, 2016. Long term Care for Older Persons in Asia and Pacific, Working Series, ESCAP, Social Development Division, Bangkok.

World Happiness Report, 2020. Sustainable Development Solutions Network, New York, NY 10115 USA(<http://worldhappiness.report/>).