VU Research Portal

Micro pensions for women; Initiatives and challenges in India

van Dullemen, C.E.; de Bruijn, J.G.M.

published in

Ageing International
2015

document version

Publisher's PDF, also known as Version of record

[Link to publication in VU Research Portal](#)

citation for published version (APA)

van Dullemen, C. E., & de Bruijn, J. G. M. (2015). Micro pensions for women; Initiatives and challenges in India. *Ageing International*, 2015(40), 98-116.
https://www.researchgate.net/publication/277887867_Micro_Pensions_for_Women_Initiatives_and_Challenges_in_India

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal ?

Take down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

E-mail address:

vuresearchportal.ub@vu.nl

See discussions, stats, and author profiles for this publication at: <https://www.researchgate.net/publication/277887867>

Micro Pensions for Women; Initiatives and Challenges in India

ARTICLE *in* AGEING INTERNATIONAL · JUNE 2014

DOI: 10.1007/s12126-014-9207-x

READS

19

2 AUTHORS:

[Caroline Van Dullemen](#)

WorldGranny S.E.

7 PUBLICATIONS 7 CITATIONS

[SEE PROFILE](#)

[Jeanne de Bruijn](#)

VU University Amsterdam

17 PUBLICATIONS 36 CITATIONS

[SEE PROFILE](#)

Micro Pensions for Women; Initiatives and Challenges in India

Caroline E. van Dullemen & Jeanne G. M. de Bruijn

Ageing International

ISSN 0163-5158

Volume 40

Number 2

Ageing Int (2015) 40:98-116

DOI 10.1007/s12126-014-9207-x

Your article is protected by copyright and all rights are held exclusively by Springer Science +Business Media New York. This e-offprint is for personal use only and shall not be self-archived in electronic repositories. If you wish to self-archive your article, please use the accepted manuscript version for posting on your own website. You may further deposit the accepted manuscript version in any repository, provided it is only made publicly available 12 months after official publication or later and provided acknowledgement is given to the original source of publication and a link is inserted to the published article on Springer's website. The link must be accompanied by the following text: "The final publication is available at link.springer.com".

Micro Pensions for Women; Initiatives and Challenges in India

Caroline E. van Dullemen · Jeanne G. M. de Bruijn

Published online: 4 November 2014
© Springer Science+Business Media New York 2014

Abstract In rapidly ageing countries, increased life expectancies threaten the poor and low-income workers. India is such a country. The number of people over sixty will rise from the present 90 million to an expected 200 million by 2030. Giving the changing demography, family structure and settlements the need for pension products is increasing. This counts particular for women since they live longer and have less opportunities to create a pension by lack of formal labour force participation. This paper focuses on recent initiatives taken in India to analyze the improvement of the pension coverage and its capacity to prevent women's old age poverty. *How can the low pension coverage in India - in particular for low-income female workers in the informal economy -, be increased?* The research focuses on new pension schemes introduced by the Indian Government and new micropension provisions by grass root non-governmental organizations (NGOs) and microfinance institutes (MFIs). Results from the case-study show, that only about 6 % of the clients of the Dhan Foundation (NGO) stated to have access to pension. This is in line with the national statistics. The pilot initiative for a micro pension program of the Dhan Foundation, show a clear positive result in willingness to pay for micro pensions among their mostly female clientele To improve the low coverage rate, micropensions could be of significant added value in the so called 'multi-pillar approach' that recognizes the complementarities between the state pension, the private sector and the civil society sector pension plans.

Highlights

- Analysis of new initiatives taken to prevent old age poverty in India.
- Low-income Indian women are facing an increasing financial risk of longevity and less family support.
- Low-income women in India's informal economy are willing and able to pay for a micropension provision.

C. E. van Dullemen (✉)
WorldGranny, Vossiusstraat 20 ii, 1071 AD, Amsterdam, The Netherlands
e-mail: cvdullemen@worldgranny.nl
URL: <http://w.www.worldgranny.nl>
URL: <http://w.www.pensiondevelopment.org>

J. G. M. de Bruijn
Free University Amsterdam, Amsterdam, The Netherlands
e-mail: jeanne.de.bruijn@vu.nl

Keywords Ageing · Risk of longevity for women · India · Old age poverty · Micro pensions · Social security

Introduction

Ageing societies are characterized by fertility decline and increasing life expectancies, resulting in increasing old age dependency ratios - proportion of individuals aged over 65 to those aged between 16 and 64. Developing countries like India started to experience this only in the last 30 years. The fertility rate has declined from more than six children on average per woman in some states, to less than two in the most developed states of India today.

Therefore, the share of the aged (60+) in the total population in India is gradually rising. The growth rate of the aged is more than twice as high, 3.8 %, compared to the general population growth of 1.8 % per year (Sadak 2009). General statistics show a share of 8.2 % aged 60+ in 2011 to 10.7 % in 2021. (Central Statistics Office Ministry of Statistics & Programme Implementation, Government of India, 2011). Hence it is expected that the 90 million 60+ people in India in 2011 will be more than doubled to nearly 200 million by 2030 (UNFPA 2012). In 2050 it is projected that the 60+ population in India will be increased by 312 % (Jalal and Younis 2014). Along this demographic transition birth rates fall due to declining child mortality, increased age of marriage, economic development, increasing education of women (on average, an illiterate woman in India is bearing 1.2 children more than a literate woman - 3.4 against 2.2) and access to contraception (Cutler et al. 2006).

Life expectancy of Indians at birth is 67 years for men and 73 years for women (WHO 2013). But women who finally reach 70 years of age, will on average live another 13 years. This gender difference in life expectancy causes a higher number of aged women than aged men. Women's longer life-spans compared to men, combined with the fact that they tend to marry men older than themselves, means that the number of widows will increase rapidly. Moreover, women face more (financial) vulnerability due to lower literacy, lesser participation on the labor market and less customary ownership of property. (Jamuna 2000; Rajan 2010). The World Health Organization (WHO) warned India already that feminization of its ageing population could lead to a rapid increase in its number of destitute widows, who need adequate resources to support themselves for approximately another 15 years on average after the decease of their husband and their ability to perform paid labor is often limited.

This increasing older female population urges to question the gender sensitivity of new pension schemes introduced by the Indian Government and by NGOs and MFIs. Are new pension provisions introduced that would reduce poverty among aged women in the near future? This is an important aspect of our main research question: *How can the low pension coverage in India - in particular for low-income female workers in the informal economy -, be increased?*

We focus on new state initiatives, and on micro pensions. In the second part we analyze under what conditions low-income women are willing and able to participate in a micropension program as currently being developed by grassroots NGOs and microfinance institutes? In this paper we focus on women with low-incomes in the informal – also called unorganized - economy since the pension coverage is among the

lowest in that category, however they do earn at least some income. This is unlike among the most extreme poor, living from less than \$1.25 a day, which is still one third of the entire population in India (including children and the very old) ([World Bank 2012](#)).

The paper is structured as follows: In section 2 we briefly describe the changing demography, family structure and settlements in India. In section 3 describes the most recent trends in state pensions in India and their meaning for older women. Section 4 describes a variety of new micro pension provisions and their potential for poor aged women. A case study in section 5 focuses on the ability and willingness of women to pay for a micro pension program like that of the DHAN (Development of Humane Action) Foundation, a non-governmental organization, based in Madurai, South India (Dhan Foundation 2009). For this purpose we use a feasibility study among 400 selected female members of DHAN foundation. The original household survey covered 44,562 members of the foundation, most women. Section 6 contains conclusions and answers the main research question.

Changing Demography, Family Structure and Urban Settlement in India

In most societies children took and still take (financial and care) responsibility for their older parents. This intergenerational system is rapidly eroding as individualization and modernization are entering the Indian society. The National Report on the Status of Elderly in Select States of India (2012) of United Nations Family Planning Association shows the main reasons why.¹ This report indicates urbanization and feminization of the older generation as main trends for eroding intergenerational family and elderly support.

Most of the 60+ Indians today still live with their relatives, in so-called co-residence. But urbanization of India is taking place at a faster pace than elsewhere in the world. By 2030, 40 % of India's population will be living in urban areas compared to 28 % in 2007. Young people in the rural areas migrate to urban areas and abroad, leaving often their parents and children behind. In the rural areas more than twice as many older women live alone or with grandchildren than in urban areas ([Rajan and Kumar 2003](#); [NSSO 2006](#)).

The “feminization” of the aged is the second most significant change in the ageing scenario of India. 60 % of the older women, in contrast to 25 % of older men, are living without a spouse.

Families shrink by lower fertility rates (women's choice). This is a prominent demographic transition in India as well. According to the National Family Health Survey (International Institute for Population Sciences 2007) 86 % of the women with two living children do not want more children. Macroeconomic research shows that intergenerational families' transfers from adult children to ageing parents are declining ([Pal and Palacios 2008](#); [Alam & Institute of Economic Growth 2008](#)). At the same time the old age dependency ratio (less children, more aged people) increases ([Alam 2004](#),

¹ UNFPA collected primary data on the socio-economic status of the elderly, their living arrangements and familial relationships, health, perceptions and access to social benefits. UNFPA (2012), Report on the Status of Elderly in Select States of India, 201. Building a Knowledge Base on Population ageing in India. http://india.unfpa.org/drive/AgingReport_2012_F.pdf

Alam & Institute of Economic Growth 2008). Both arguments call for formal pension systems, particular for poor women and single women (Cigno and Rosati 1992; Drèze and Murthi 2001; Boldrin et al. 2005, Billari et al. 2008). The Indian government realizes this and initiated new policies (Shah 2005).

State Pension Provisions

The Indian government faces rapid urbanization, breakdown of the intra family support system, growth of nuclear families and increasing longevity. This means more poverty risks for older people, especially for women, often widows. How does the Indian government address these risks?

Usually pension systems in countries are categorized in three so called pillars according to the World Bank categorization. The first pillar refers to (federal) state provisions, tax based, non contributory 'social' pensions. The second pillar is the funded private pillar, which refers to formal labour related savings, negotiated by employers and employees. The third pillar consists basically of savings that cover self-employed workers in the informal economy.

Recent State Pension Initiatives (Pillar 1)

In 2007 the Indira Gandhi National Old Age Pension Scheme (IGNOAPS) was launched. This means-tested, first pillar scheme strives to provide a monthly pension to the very poor aged 65+ and classified as living below the poverty line of \$1,25 (BPL families). In 2009 the Indira Gandhi National Widow Pension Scheme and the Indira Gandhi National Disability Pension Scheme came into place, with comparable provisions for widows and disabled, covering about 3.5 million BPL widows of 40–59 years.

Hence the IGNOAPS scheme faced mounting criticism for its small size and low coverage. It covers only around 20 % of India's estimated 84 million older people. The actual pension received varies between states, with some people receiving as little as Rs.200 (US \$4) a month. In 2013 a massive protest march to New Delhi resulted within a week in an unprecedented commitment of the Government of India: every aged 65+ would receive the Indira Gandhi National Old Age Pension Scheme (IGNOAPS). Earlier research of the World Bank showed that in India pillar 1 pensions do cover only about 5 % of poor older people (Pal and Palacios 2008; Asher 2007).

It is too early to answer our first question: will the above new pension schemes of 2013, introduced by the Indian Government, prevent future old age poverty of women? With the launch of the Indira Gandhi National Widow Pension Scheme in 2009 the government responded to the feminization of older generation. However, its implementation needs improvement in order to cover a growing number of widows.

Another category that urgently needs some pension coverage are workers –particular the large number of women– in the informal sector in India. In the informal sector employment and income are irregular and there is no social security in case of accidents, illnesses, or ageing. According to the latest census (2011), 346 million people (more than 85 % of the Indian working population) work in *the informal economy*. At least 120 million of them are women. Informal wage employment is common among employees of informal enterprises; casual or day workers; temporary

or part-time workers; paid domestic workers; unregistered or undeclared workers and industrial out workers (home workers) (Chakrabarti 2009; Bordia and Bhardwaj 2003). The Indian government improved social security for these categories, including the development of new pension plans and the public information improved by means of opening a pension portal by the government (Holzmann et al. 2009).

Job Related Pension Provisions (Pillar 2)

An interesting development in India in the context of a pillar 2 pension provision, is the substantial government investment in the NPS-Lite scheme launched in 2010. This pension program specifically targets the informal workforce. The government contributes financially to the savings of every NPS-lite participant and therefore it acts as an “employer”. This NPS-Lite scheme aims at building a fund sufficient enough to buy an annuity (continuing payment with a fixed total amount) for old age (Figs. 1 and 2).

Private Savings, Including NGOs and MFIs Pension Provisions (Pillar 3)

Pillar 3 refers to (voluntary) *private savings*. The provisions within this pillar are a new playing field in many developing countries for a variety of stakeholders, policy makers and interest groups. Also India develops a trend in this area. A long history of communal financing, credit unions and Rosca’s (rotating credit associations), could be seen as a forerunner for this new type of micro finance schemes and makes the development promising (see next section). In Fig. 3 the potential market for products within the realm of pillar 3 is outlined.

Micropensions in India

This section describes new developments in microfinance and in particular micro pension in India and their potential combating and preventing future poverty of aged women. Traditionally, the safest and most cost-effective way for people to improve

Fig. 1 Total Fertility Rates, India and Selected States, 1972–2009. Source: Sample registration statistical report 2010, report nr. 1, 2012, Office of the registrar general, India Ministry of Home Affairs, Government of India, New Delhi

Fig. 2 Percent distribution of economically dependent aged persons by category of persons supported by the aged

their economic position and prepare for old age, is *asset accumulation* (land, habitat, property) and diversification of savings (Attanasio, Burgiavini, 2003). Low-income workers take opportunities to invest in real assets, most common in small plots, cattle and farmland. For women, to invest in this way, is not always an option because of customary laws that forbid female ownership or inheritance. Therefore women often save in gold and tradable goods. Older forms of communal financing or informal savings are found in Rotating Savings and Credit Associations (ROSCA'S) (Smets 2000). A Rosca is a group of individuals who agree to meet and save communal for a defined period of time. Each participant gets one time the communal savings. In its simplest form: 10 people put every week 100 Rupees in the Rosca. Every week it is someone's turn to get the 1000 Rupees in order to invest in their small business. In 10 weeks time every participant had her turn. Often Rosca's are womens groups. In the next sections we elaborate on the implementation of these ideas in microfinance.

Fig. 3 Potential client base for New Pension Scheme (NPS) - informal sector workers+unpaid family workers+non covered formal sector employees. Source: Palacios (2011) – EPFO=Employee's Provident Fund Organisation

Microfinance for Lifecycle Needs

Since the founding of the Grameen Bank in Bangladesh (1983), microfinance has become a global trend (Khandker and Samad 2013). Microfinance is a general term to describe financial services to low-income individuals or to those who do not have access to conventional banking services. Its founder, Dr. Muhammad Yunus, started with providing microcredit services whereby the group cohesion or ‘social capital’ formed in the lending and saving group was considered as form of social collateral. The participants could help each other and put pressure as well. (Yunus and Jolis 1999, Guha 2007).

Research shows that even people with a low-income can actually save (Dowla & Barua 2006, Banerjee & Duflo 2007). Women in general save relatively more than men do and women are better re-payers of loans. They invest more prudently, which yields more benefit in the long run. Low-income women workers have also proven to be “better savers”, more reliable, and more effective investors (Seibel 2005, Fujita and Sato 2014). They are able to frequently set aside small sums of money, but often they lack vehicles to convert these into funds large enough to support them during old age. Microfinance institutions are willing to fill this niche with new savings and insurance schemes, especially life insurance (Brau and Woller 2004). Brau and Woller summarize several reasons for this popularity:

1. Growing demand for savings products because the traditional assets of women like gold being vulnerable to loss, theft and value changes.
2. Micro Finance Institutions offer the possibility to use collected funds to finance own credit services and in this way reduce dependence on foreign donors (that used the MFI's as vehicles for their development strategy).
3. Awareness of changing family structures; less or no children for financial support at old age, children live far away or maybe abroad, women widow much more than man, all possible risks for poverty in old age.

Microfinance for Old Age Provisions

Much has changed in India since the beginning of microcredit strategies. The rural economy has diversified, the cash economy has expanded, the service sector has developed, and mobility has increased. These changes gave rise to re-think financial sector interventions, including new ways of thinking about how low-income workers, and mothers in particular, use financial services and which kinds of services these so-called under-served require. (Hatch, 2011)

Who made the first step in rural India to use microfinance for old age provisions? The Self Employed Women's Association (SEWA) started as early as 1993 with a pioneer pension scheme. These women earned a living through their own small (one person) business or in agricultural work. Under the SEWA micropension plan, these women invested a defined sum of money on a monthly basis for a fixed rate of return, then of 7 %. The deposit has a set tenure at the end of which the client retrieved its principal along with the interest earned during the investment period. More than 3,000 women subscribed in 1993 to this scheme. In 2002, SEWA launched a modified

version of this original micropension product and gained 5,700 new participants. These clients were allowed to save as little as 30 rupees monthly. (Gianadda 2007).

A second example on the Indian subcontinent is “Grameen II” based on the original micro pension scheme of the Grameen Bank in Bangladesh. The scholars Dowla & Barua (2006) researched the pioneer years of the Grameen Bank and its programs and described the Banks’ motivation for adding a new long term saving scheme (micropension scheme) to its tradition of micro finance products. The principle is that Grameen-(female) members mandatory participate in this Grameen II saving scheme during paying back their loans.

Gianadda (2007) and Uthira & Manohar (2009) reviewed the new savings schemes clustered as micropension schemes. These saving schemes do not yet comprise any compulsory annuity of the accumulated funds as are known in more developed financial markets, due to the lack of reliable data on mortality rates of workers in the informal, unorganized and rural economy. This lack of mortality tables is a major stumbling block to develop appropriate micropension products (Shankar and Asher 2011). Another risk politicians and those involved in NGOs like to stress, is the turmoil in financial markets that can generate pension fund losses, unaffordable for the poor. Another concern is insufficient basic knowledge of financial products. A mayor concern is the supposed high transaction costs² for clients because of the small amounts they deposit.³ We describe three different co-contributed funds:

1. The Invest India Micro Pension Scheme, IIMPS
2. The Abhaya Hastham schemes
3. Dhan Foundation, partner-agent model like SEWA

Invest India Micro Pension (IIMPS) is a pension scheme for low-income, informal sector workers. IIMPS was established in 2006 as an administrative service provider. The company is developing a “national level micropension marketplace” through which low-income workers will be able to channel retirement savings into the stock markets. IIMPS advocates for targeted co-contribution by the government for low-income groups. Basically, Micro Pension clients, mostly women, save between Rs.200 and Rs.300 per month in a customized, integrated financial solution consisting of pension, insurance and savings products. The revenue model of IIMPS does not differ much from the NPS-Lite. Since inception, roughly 400,000 urban and rural low-income individuals across nearly 100 districts of 14 States of India use the Micro-Pension model to save for their old age. The target is to reach 5 million people before the end of 2014.

The Abhaya Hastham Co-contributory Pension is a co-contributory pension scheme for the women of Andhra Pradesh, delivered through the financial Self Help Groups (SHGs)⁴ of SERP, a government sponsored NGO. The pension comes with some

² Microfinance institutes aim to work more efficient, contain transaction costs by using new technology or reduce their operating costs by finding a way of innovative substantial insurance for microfinance loan; so as to partly shift the burden of non repayment from the poor to some third party. However further research is needed to establish an appropriate interest rate. <http://www.cgap.org/about/faq/why-do-mfis-charge-high-interest-rates> and <http://www.tropentag.de/2006/abstracts/posters/58.pdf>

³ Ramesh S. Arunachalam, Microfinance Consulting Group on <http://www.solutionexchange-un.net.in/mf/cr/cr-se-mf-03040701.pdf>

⁴ A self-help group (SHG) is a village-based financial intermediary usually composed of 10–20 local women or men. Members make small regular savings contributions until there is enough capital in the group to begin lending.

different features like a life insurance cover of Rs.30.000 (US\$672) and a scholarship of Rs.1,200 (US\$26.89) per month for children of the clients. Until 2012 nearly 4.3 million members have enrolled for the pension scheme which is less than the expected 6 million in 2009. Though demonstrating fairly reasonable outreach, this scheme is highly dependent on the government subsidy and is expected to be nearly self sufficient only by the year 2045.

The partner-agent model is a scheme whereby the MFIs act as partner and one of the state banks of India as the agent. This model delivers a win-win situation in which the asset management company (agent) reaches the low-income market while the MFI expands its product range. In addition, the partnership allows both institutions to focus on their core business and expertise, the NGO on their direct relations with clients and administration, the bank on their investment capacity (Gianadda 2007).

The *UTI Retirement Benefit Pension Scheme*⁵ is such a partner-agent pension scheme. More organizations like f.i Mann Deshi Bank and the Shepherd have similar arrangements with one of India's largest state banks.

We conclude that, based on our literature study, India is amongst the pioneers in elaboration on micro-financing schemes with new savings products for various groups. From a gender perspective this is positive; most participants are women with low-incomes working in the informal economy. From a coverage perspective, these developments are just a beginning. Taking the demographic changes in consideration and the expected feminization of the aged, there is more room for pension reforms.

Sustainability of Micro Pension Schemes

Are micro pension schemes sustainable? This is a major concern because of the dropout of participants. Reasons for leaving are a.o: high training and administration costs; no monthly pension statements, so clients lack trust whether the savings were actually administrated; the information is given in English instead of the local language.

If these challenges could be addressed, more micro pension programs could have the potential to upscale enrollment. Uthira and Manohar (2009) executed a desk research on sustainability of micropensions in the era of pension reforms in India. They concluded that if strategically and judiciously used, micropensions could be a sustainable product that will contribute to poverty alleviation. Poverty alleviation as a state responsibility is so far partly complemented by financial Self Help Groups, NGO initiatives and partly by MFIs.

Case Study: Micro Pension Scheme of the Dhan Foundation

In the case study below we research the question:

“Under what conditions are low-income women in the informal sector willing and able to pay for a micropension provision as currently being developed by grassroots NGO's and the microfinance sector for their older female clients?”

⁵ UTI Retirement Benefit Pension Scheme is a pension scheme notified by the Government of India's Gazette Notification dated 3 Nov 2005, under Income Tax Act 1961, Sub Clause (2), Part (XIV), Section 80C

The case study is about the new micropension scheme of the Development of Humane Action (DHAN) Foundation, a non-governmental organization (NGO) in Tamil Nadu, Madurai, South India. DHAN – which is Tamil for ‘giving back to society’- is working with over a million households through different thematic programs to reduce poverty by diversifying the range of financial assets and sharing the social economic risks. Their microfinance program is executed by a separate entity, People Mutual, registered as a trust under Indian Trusts Act on December 11, 2003. People Mutual is a mutual insurance initiative promoted through collaboration between DHAN Foundation, Oxfam Novib, Rabobank Foundation and Eureko Re insurance company, all based in the Netherlands. People Mutual’s mission is to safeguard poor people from risks and vulnerabilities through collaboration with insurance providers and mutual solutions to reduce poverty. (People Mutual Annual Report 2011).

The members of People Mutual’s already save in their financial Self Help Groups (SHG’s) and Farmers Associations (FA’s), These SHG’s and FA’s, so called peoples’ institutions, were built on the principles of self help and mutuality aiming to address poverty. This community banking of Peoples Mutual enables low-income families to decide on products and services suitable for them and building appropriate systems and operational mechanisms to sustain them.

Building on this experience, the DHAN Foundation in partnership with WorldGranny, Pension Development Network and HelpAge India decided to pilot a Dhan’s micro-pension program for their clients. The asset management of the micropension product would be executed by the Life Insurance Company of India (LIC). Before the pilot could start, a household study and a feasibility study were conducted. The household study is conducted amongst financial self-help-groups in 20 locations (branches). 44, 562 households were interviewed by a pre-tested household interview. With the results of this household survey 10 locations were shortlisted for a feasibility study of which we review the results in this paragraph. This feasibility study was executed among about 400 respondents, spread over 5 age categories (<30, 31–40, 41–50, 51–60, >60). From each of the 10 selected locations 8 members of a financial Self Help Group and Farmers Association were interviewed, all women. The feasibility study sample of 400 is representative for the total membership of the Dhan foundation states and contexts. This means that the 10 wealthiest locations out of 20 were chosen (see Table 1). 10 wealthiest locations are considered as those comprising the test market for the micropension pilot of the Dhan Foundation.

Baseline Study

The baseline survey was undertaken to understand demographic composition, occupation patterns and income levels of the target group (People Mutual, 2010). The research objective was to describe the socio economic conditions of the aged poor and their (traditional) support mechanisms of the last decade in rural as well as urban contexts. This baseline study was conducted in order to determine which 10 locations could be chosen for more the more in-debt feasibility study.

Table 1 Ranking of locations by scoring composed variables

Variable	Statistics	Weight
- Progressive Age Composition	Median	1.5
- Household Annual Savings	Median	1.0
- Household Cumulative Savings	Median	1.0
- Household Annual Income	Median	0.5
- Value of Income Generating Assets	Median	0.5
- Access to Existing Pension Schemes	Median	2.0
- Access to Life Insurance	Median	1.0

Results of the Feasibility Study

The aim of the feasibility study is to investigate the willingness and ability of low-income women in the informal economy to save for a micro pension product.

In the feasibility the 45–60 age category is the main age group to investigate willingness and ability for pension schemes. This age category comprises 26 % of the sample. The 60+ age category concerns only 3.2 % of the sample. More than half of the women of 60+ are widowed. The respondents have an average yearly income of \$ 738 (40,620 Rs.). Urban locations show a higher annual income pattern (about \$ 1,000 Rs. 60,000) than in rural and coastal locations (average annual income around \$500 (Rs. 30,000)).

On average 60+ women had 3 times *less* income than women aged between 31 and 40.

Pension coverage in the sample ranged from 28 % in (Mudhukulathur) to 0 % (in Siraram). Access to existing pension schemes (state pension, pillar 1 or job pensions, pillar 2) is low. On average only 6.0 % of the respondents (measured by location average) had access to a kind of pension provision on national or state level.

Annual savings were on average 1347 rupees (>100 R per month) per household (\$ 29). The average amount of cumulative savings (=total saving over a life time) of the interviewed households was 8439 rupees (\$ 185), in about 6 years of savings.⁶ However, the value of income generating assets such as land and other assets is still a multi fold of the annual savings per household. Households have on average total assets of 43362 rupees (\$ 953).

In the next part the demographics are related to the variables “willing to pay for a micro pension product” and “ability to contribute”.⁷

The Motivation for Participating in Micropension

The central question for the case study is: *Under what circumstances are the female clients in the case study willing and able to pay premiums for a micropension product?*

⁶ The variance between the locations is quite significant. In the location of Athun, the amount of saving per household is 24,259.84 rupees - US \$ 54, and in Kondalampatti the households savings numbered almost threefold, with an average of US \$158

⁷ Variables used: Progressive Age Composition, Household Annual Savings, Household Cumulative Savings, Household Annual Income, Value of Income Generating Assets, Access to Existing Pension Schemes, Access to Life Insurance.

Several approaches to measure willingness-to-pay have been presented in academic literature. Breitner et al. (2006) provide a systematic overview on these competing approaches. This is important because different studies have shown that minor variations of prices and the corresponding consumer behavior can have notable effects on revenues and profits. For long-term products like micropensions this is of even more importance in order for individuals to establish their proper returns.

In the case study, the respondents are not asked for their actual *reasons* to pay, just whether they would be *willing* to pay. In every age group we found a gap between the perceived financial needs in old age and the perceived availability (see Table 2). The gap increases per age group, for the 30–45 it is 13 %, for the 60+ the assumed gap between actual and needed income is about 60 %.

Regardless of age category, the overall majority of respondents (90 % or more) expressed the need for a micropension. There was no relationship between the size of the assumed income gap (actual and needed income) and respondents' opinion on needing a micro pension. Only those who expressed *no need* for a micro pension showed some variety in age groups. This showed a relation with the size of the assumed income gap. The age groups with the smallest assumed gap answer a little more often with “no need for micro pension”. A possible explanation is the amount of savings or assets that can be used as old age provisions.

In general we see that the younger generation is more willing to pay for micro pensions because they no longer expect much financial family support once they become aged.

The gap between needed and received money is the highest in the >60 years category (Table 2). On the other hand, the expected benefits of the respondents (Table 3) are higher than the need (Table 2). The main reason why the 45–60 age category is willing to pay for a micropension is because of the very low pension coverage in pillar 1 and because they have no access to job related pensions (pillar 2). For this category micro pension scheme like of Dhan Foundation is at least a possibility, although not yet attractive enough to invest their savings from their savings account with the Self Help Group/Farmers' association (Table 4)

Our respondents were not only asked about their “willingness to pay” for a micro pension, but were also asked if they were ‘willing to use their current savings’ for it’ (Table 4).

With respect to Tables 4, 5 and 6 we notice that a vast majority of the respondents is willing to pay for a micro pension. However, most of them are hesitant to use their

Table 2 Financial needs of individuals versus availability

	>60 years	51–60 years	41–50 years	31–40 years	≤30 years
Money required per month (Rs.)	1,095.0	1,011.2	692.50	799.38	749.38
Money got different sources for spending (Rs.)	473.50	605.00	555.63	706.88	660.94
Unmet amount (Rs.)	621.50	406.25	136.88	92.50	88.44

The need is calculated as the perceived amount required as minimum living standard and the amount received. The willingness to participate in a micropension program is taken as the expressed preparedness to join a potential pension program

Table 3 The need for a micropensions (per cent)

Opinion about the need for micropension	>60 years	51–60 years– years	41–50 years	31–40 years	<=30 years
Yes, I need	93.75	91.25	90.00	90.00	91.25
No, I don't need	1.25	3.75	10.00	7.50	8.75
I can't say	5.00	5.00	–	2.50	–

current savings for the new micropension product. With this product the liquidity is much less. Younger respondents are even more reluctant, most probably because of other life-cycle needs. The liquidity of normal savings compared to a pension scheme is more attractive for younger people. This is an important condition to cope with as NGO's of MFI's.

Coming back to the average savings of 100 rupees per month it is interesting to see that this amount is more or less the same regardless of income levels. The average annual savings in all locations is close to 100 rupees, as well in case of rural and coastal locations with average annual income around 30,000 rupees, as in urban locations with incomes around 60,000 rupees per year. This standard 100 rupees saving is remarkable the same amount as other micropensions schemes require as a monthly minimum, like NPS, Shepherd, Mann Deshi Bank and ASA –Activists for Social Alternatives Trichirapalli.

The difference has to do with the asset value in rural areas which is still usually higher than in the urban and coastal areas. In rural areas ownership of land and livestock assets are major source of livelihoods and savings for old age.

Combining these data on savings with the need and ability, it suggests that younger respondents would be more eager to participate in a micropension program, since they do not have to transfer their accumulated savings in a pension scheme. This is one of the conditions for low-income women to save for a micropension.

Respondents report a high dependency for personal financial needs in every age group. The respondents of >60 group are for 72.5 % to be financially depending on themselves or others. In the age category 41–50 the dependency is somewhat lower, probably due to own income out of labour.

These data are similar to those figures presented in the report from the Indian Government (see Fig. 2) with this difference that a larger percentage of older people is dependent on the children with respect to a lesser percentage on spouses. The average opinion on the family support is positive, though it diminishes during the life-cycle.

Table 4 Pension benefits expected per month (rupees)

Stratum	Amount
>60 years	841.88
51–60 years	1,265.00
41–50 years	1,241.25
31–40 years	1,733.75
<=30 years	1,903.75

Table 5 Willingness to pay premium (Rupees)

Stratum	Amount (Month) in Rs.	Amount (year) in Rs.
>60 years	74.19	890
51–60 years	94.31	1131
41–50 years	98.44	1181
31–40 years	91.50	1098
≤30 years	113.75	1365

This is also in line with the research of a.o. Alam (2004, Alam & Institute of Economic Growth 2008) and implies the need for financial self reliance for women in later life.

Conclusions

The main question in this paper was:

How can the low pension coverage in India - in particular for low-income female workers in the informal economy -, be increased?

1. State initiatives

Looking at the new social security programs for the ageing low-income women in India, there are positive developments emerging in all 3 pillars of the social security system; governmental, job related schemes and in the realm of private/micro pension systems. The feminization of the ageing population could lead to a rapid increase in its number of widows living in poverty. Our question whether the new pension schemes introduced by the Indian Government will reduce old age poverty, can be answered positively. Though the state is actually participating in private microfinance initiatives that are mainly geared to women, this does not mean that the gender-specificity of the demographic transition is fully addressed. India is half way the demographic transition, which is expected to be finished only at the end of the 21th century. India's population will still increase with about 60 % during the 21th century. Therefore India's old age dependency rate is still much smaller than in developed countries, but is growing quickly. According to World Bank only about 5 % of older Indians have access to a pension provision. 6 % of the Dhan-clients stated to have access to pension. India has governmental pension provisions (pillar I) and job related pensions (pillar II). These are insufficient especially for low-income workers in the unorganized sector where most women earn their income.

Table 6 Willingness to use savings in SHG/FA as a lump sum premium payment towards micro-pension (percent)

Willingness	>60 years	51–60years	41–50 years	31–40 years	≤30 years
Yes, I am willing	58.75	45.0	42.5	33.75	36.25
No, I am not	27.5	36.25	45.0	52.5	53.75
I can't say	13.75	18.75	12.5	13.75	10.0

Table 7 Dependence for personal financial needs (per cent)

Dependence	>60 years	51–60 years	41–50 years	31–40 years	≤30 years
Own	27.50	32.50	40.00	38.75	37.50
Spouse	26.25	37.50	50.00	58.75	58.75
Other family members	35.00	23.75	6.25	1.25	3.75
Friends, relatives and other external sources	10.25	6.25	3.75	1.25	–
Dependency	72.50	67.50	60	61.25	62.50

2. Micropensions

The Government executed Invest India Income and Savings Survey 2007⁸ indicated that approximately 61 million *low-income unorganized workers* are interested to save for retirement, and nearly 25.8 million of them can afford (and are willing) to pay Rs.2,300 (\$ 51.56) per year for a private contributory pension scheme. This is 42.30 % of low-income workers.

In 2010, the Indian national government initiated an interesting policy of funding micro financing schemes in order to stimulate the unorganized sector workers to save. Microfinance institutes (MFIs) investigated the chance for developing micro pension products as a way to increase pension coverage. The micropension schemes offered in India are amongst the pioneers, like the most recent program of the Dhan-Foundation.

3. Feasibility study

In the second part we analyzed under what conditions low-income women were willing and able to participate in a micropension program as currently being developed by grassroots NGOs and microfinance institutes. The results of this case- study lead to the following conclusions:

- The need for micropension is perceived in all the age groups. The gap between money required and money received is higher for people aged >60. The expected pension benefits (Table 7) by the respondents are higher than the financial need (Table 2).
- There is a common reluctance among this female respondent group to move savings already invested in the savings program of the Self Help Group (SHG/ Farmers association) towards premium for micropension. Maybe because the micropension scheme is a long term saving schemes and therefore sets restrictions to the liquidity. This result is comparative with other research showing also less likelihood for long term financial liabilities for people facing life cycle costs, like healthcare, education and even wedding expenses (Hatch 2011).

⁸ This survey is supposed to be the most comprehensive pan-India market research ever produced on the financial capabilities, preferences, behaviour and outlook of India's mass market for retail finance, insurance and retirement products. www.cafra.org.in/docs/Renuka%20Sane%20%20Round%20Table%20Discussion%20Measuring%20financial%20inclusion%20from%20demand%20side.pdf

Table 8 Opinion about support of other family members

Opinion	>60 years	51–60 years	41–50 years	31–40 years	≤30 years
Excellent	47.50	58.75	65.00	71.25	68.75
Satisfactory	18.75	28.75	26.25	23.75	28.75
Not satisfied: feel lonely	28.75	11.25	6.25	5.00	2.50
Can't say	5.00	1.25	2.5	–	

The respondents are asked about their opinion without family members present to prevent a positive bias

- Almost three quarters of the respondents (women) are dependent on family for financial needs.

The feasibility study of the Dhan Foundation shows that 74 % is willing to pay a premium for micropension provisions (in all age categories except for aged >60). That is about twice as much as in the earlier governmental survey of 2007 (see Table 6). Most probably this has to do with the gender aspect. Other researchers (Palacios 2011) show that women are far more likely to join a pension scheme; that income positively correlates with willingness to join; that the married are more likely to participate; that landholders are less likely and that there is a high correlation with insurance coverage. The Dhan respondents are almost all women and have quite some financial awareness, due to their membership of the Dhan foundation. Our sample is probably also a somewhat higher segment of the *low-income unorganized workers* then in the governmental survey of 2007 (Kannan and Papola 2007). But it could also be another indication that since 2007 longevity awareness further increased and therewith the readiness to pay premiums for micropension provisions.

The pension coverage by direct governmental provisions is still low (1st pillar). This is also the case for pension coverage by job related provisions and hybrid schemes like NPS and (though to a lesser extent) NPS-lite (2nd & 3rd pillar). Our research on the Dhan-foundation data show the increasing readiness for 3rd pillar provisions like micropension schemes, particular among one of the most difficult population groups in this respect in India, the low-income unorganized workers, in particular women. Our findings among this female respondent group with relatively higher financial awareness supplement those of others and give insight in opinions of an actual local situation.

In this research, we did not pay attention to the flexibility of payments by women working in the informal sector. They have a small and irregular income. Flexibility of contributions encourages contribution of small but frequent amounts resulting not only to lesser contributions but also high transaction costs and consequently low benefit payouts. Voluntary contributions meant to encourage enrolments result to the participants not prioritizing pension contribution; high enrolment lowers administrative costs but results to diseconomies of scale in the long run and saving for the future minimizes old age poverty but lowers the amounts available for consumption today especially given that informal sector participants do not have enough means for today (Njuguna, 2012). It would be interesting, as a point of attention for future research, to pay attention to the options of daily, weekly or

monthly payments to the scheme in relation to the costs-structure and efficiency of the total scheme and whether this is beneficial to low-income participants. The results could of added value for a multi-trajectory (pillars) approach in social security policies for India as the road to wider pension coverage in the informal economy (Table 8).

Conflict of Interest The authors Caroline van Dullemen and prof. Jeanne de Bruijn declare that they have no Conflict of Interest.

Informed Consent Informed consent was obtained from all individual participants included in the study. All procedures followed were in accordance with the ethical standards of the responsible committee on human experimentation (institutional and national) and with the Helsinki Declaration of 1975, as revised in 2000(5).

Ethical Treatment of Experimental Subjects (Animal and Human) This article does not contain any studies with human or animal subjects performed by the any of the authors.

Annex

Table 9 Household Annual Income

Sl. No.	Locations	State	Programme	Context	Annual Income
1	Thiramangalam (RFDT)	TN	RFDT	Rural	53,000
2	Mudhukulathur (Tank)	TN	TANK	Rural	30,000
3	Thiruppathi	AP	KCBP	Urban	72,000
4	Chittoor	AP	KCBP	Rural	42,000
5	Kuppam	AP	KCBP	Rural	50,400
6	Shanti Nagar	AP	KCBP	Urban	36,000
7	Mgadi	KA	KCBP	Rural	36,000
8	Bannur	KA	KCBP	Rural	24,000
9	Sellur	TN	KCBP	Urban	60,000
10	Sanarpatti	TN	KCBP	Rural	36,000
11	Mullai	TN	KCBP	Rural	30,000
12	Sirpam	TN	CALL	Coastal	24,000
13	Sangamam	TN	CALL	Coastal	36,000
14	Sigaram	TN	CALL	Coastal	26,000
15	Ponnammapettai	TN	KCBP	Urban	60,000
16	Athoor	TN	KCBP	Rural	48,000
17	Kondalampatti	TN	KCBP	Urban	50,000
18	Veerapandi	TN	KCBP	Rural	36,000
19	Periyakulam	TN	KCBP	Rural	33,000
20	Pudhucherry	PY	CALL	Coastal	30,000

References

- Alam, M. (2004). Ageing, old age income security and reforms: An exploration of Indian situation. *Economic and Political Weekly*, 3731–3740.
- Alam, M., & Institute of Economic Growth (India). (2008). *Is caring for elders an act of altruism?: Some evidence from a household survey in Delhi*. Delhi: Institute of Economic Growth.
- Asher, M. (2007). *Pension reform and old age grants in India, Paper presented at the conference on Innovative Approaches to Social Security in India*. Brazil: University of Johannesburg.
- Attanasio, O. P., & Brugiavini, A. (2003). Social security and households' saving. *The Quarterly Journal of Economics*, 118(3), 1075–1119.
- Banerjee, A. V., & Duflo, E. (2007). The economic lives of the poor. *Journal of Economic Perspectives*, 21(1), 141–168.
- Billari, F. C., Galasso, V., & Centre for Economic Policy Research (Great Britain). (2008). *What explains fertility?: Evidence from Italian pension reforms*. London: Centre for Economic Policy Research.
- Boldrin, M., De, N. M., Jones, L. E., & National Bureau of Economic Research. (2005). *Fertility and social security*. Cambridge: Mass: National Bureau of Economic Research.
- Bordia, A., & Bhardwaj, G. (2003). *Rethinking pension provision for India, 2003*. New Delhi: Tata McGraw-Hill Pub. Co.
- Brau, J. C., & Woller, G. M. (2004). Microfinance: A comprehensive review of the existing literature. *Journal of Entrepreneurial Finance and Business Ventures*, 9(1), 1–26.
- Breidert, C., Hashler, M., & Reutterer, T. (2006). A review of methods for measuring willingness-to-pay b. *Innovative Marketing*, 2(4), 8–32.
- Chakrabarti, S. (January 2009). Gender Dimensions of the Informal Sector and Informal Employment in India, Paper presented at the Global forum on gender statistics 26–28, Accra, Ghana.
- Cigno, A., & Rosati, F. C. (1992). The effects of financial markets and social security on saving and fertility behavior in Italy. *Journal of Population Economics*, 5, 319–341.
- Cutler, D., Deaton, D., & Lleras-Muney, A. (2006). The determinants of mortality. *Journal of Economic Perspectives*, 20(3), 97–120.
- Dowla, A., & Barua, D. (2006). *The poor always pay back: The Grameen II story*. Bloomfield, CT: Kumarian Press.
- Drèze, J., & Murthi, M. (2001). Fertility, education, and development: Evidence from India. *Population and Development Review*, 27(1), 33–63.
- DHAN Foundation, (2009), *Annual Report 2009*. Madurai: DHAN Foundation.
- Fujita, K., & Sato, K. (2014). SHGs for Poverty Alleviation?: Insights from a Tamil Nadu Village Under Rapid Economic Development. In *Microfinance, Risk-taking Behaviour and Rural Livelihood* (pp. 69–85). Springer India.
- Gianadda, S. (2007). Micropensions, Using the Partner-Agent Model to Develop Old-Age Security for Low-Income People in India, Centre for Micro Finance (CMF).
- Guha, S. (2007). *Impact of competition on microfinance beneficiaries: evidence from India*. Working Paper, 21. Asia Research Centre, London School of Economics and Political Science, London, UK.) Asia Research Centre, London School of Economics and Political Science.
- Hatch, J. (November, 2011). When Clients grow old: The Importance of Age in Addressing Client Needs, Global Microcredit Summit, Commissioned Workshop Paper presented at the Microcredit Summit Valladolid 2011.
- Holzmann, R., Robalino, D. A., & Takayama, N. (2009). *Closing the coverage gap: Role of social pensions and other retirement income transfers*. Washington, DC: World Bank.
- International Institute for Population Sciences. (2007). *National Family Health Survey (NFHS-3), 2005-06: India*. Mumbai, India: International Institute for Population Sciences.
- Jalal, S., & Younis, M. Z. (2014). Aging and elderly in Pakistan. *Ageing International*, 39(1), 4–12.
- Jamuna, D. (2000). Ageing in India: Some key issues. *Ageing International*, 25(4), 16–31.
- Kannan, K. P., & Papola, T. S. (2007). Workers in the informal sector: Initiatives by India's National Commission for Enterprises in the Unorganized Sector (NCEUS). *International Labour Review*, 146, 321–329.
- Khandker, S., & Samad, H. (2013). *Microfinance growth and poverty reduction in Bangladesh: What does the longitudinal data say?* Dhaka: Institute of Microfinance.
- Njuguna, A. G. (October 12, 2012). Critical Success Factors for a Micro-Pension Plan: An Exploratory Study. *International Journal of Financial Research*, 3, 4).
- Organization, W. H. (2013). *World Health Statistics 2013*. Geneva: World Health Organization.
- Pal, S., & Palacios, R. (2008). *Understanding poverty among the elderly in India: Implications for social pension policy*. Bonn: IZA.

- Palacios, R., (2011). Early lessons from attempts to extend pension coverage in India through an MDC, World Bank Institute.
- Rajan, S. I. (2010). Gender and widowhood: Disparity in health status and health care utilization among the aged in India. *Journal of Ethnic and Cultural Diversity in Social Work*, 19(4), 287–304.
- Rajan, S. I., & Kumar, S. (2003). Living arrangements among Indian elderly: New evidence from national family health survey. *Economic and Political Weekly*, 38(1), 75–80.
- Sadhak, H. (2009). Does not India need a default option in the new pension system? *Economic and Political Weekly*, 44(46), 59–68.
- Seibel, H. D. (2005). *SHG banking in India: The evolution of a rural financial innovation*. Köln: Univ. zu Köln, Arbeitsstelle für Entwicklungsländerforschung.
- Shah, A., & Rajiv Gandhi Institute for Contemporary Studies. (2005). *A sustainable and scalable approach in Indian pension reform*. New Delhi: Rajiv Gandhi Institute for Contemporary Studies.
- Shankar, S., & Asher, M. G. (2011). Micro-pensions in India: Issues and challenges. *International Social Security Review*, 64(2), 1–21.
- Shanthi, K., & Madras School of Economics. (2006). *Female labour migration in India: Insights from NSSO data*. Chennai, India: Madras School of Economics.
- Smets, P. (2000). ROSCAs as a source of housing finance for the urban poor: An analysis of self-help practices from Hyderabad, India. *Community Development Journal*, 35, 1.
- UNFPA (2012). By choice, not by chance: Family planning, human rights and development.
- Uthira, D., & Manohar, H. L. (2009). Economic implications and sustainability of micropensions in the era of pension reforms in India. *International Research Journal of Finance and Economics*, 1(24), 36–47.
- World Bank. (2012). *World Development Indicators 2012*. Washington, D.C: The World Bank.
- Yunus, M., & Jolis, A. (1999). *Banker to the poor: Micro-lending and the battle against world poverty*. New York: PublicAffairs.

Caroline van Dullemen is a sociologist, working on her PHD at the Free University of Amsterdam. She is the founder of WorldGranny, an NGO that focuses on the improvement of the quality of older people worldwide. WorldGranny has the advisory status at the UN. Van Dullemen is the author of three books and numerous articles in journals. She is a frequent speaker at conferences as a specialist on global ageing, social security and (micro) pensions and economic self-reliance, especially for women.

Prof. Jeanne de Bruijn formerly served as Rector Magnificus and professor of Sociology at the University of the Netherlands Antilles (UNA) and as professor in Sociology of Gender at the Free University in Amsterdam. She is currently teaching at the University College Roosevelt and the Free University. As a researcher, prof. de Bruijn has published on various subjects like on Work, Care and Gender; Domestic Violence; Migration and Integration and Higher education in Small Island Development States. She supervised about 20 PhDs. She received scholarships for a.o. the University of Wisconsin-Madison (Fulbright), Stanford University and Washington University. She was editor of the journal *International Sociology*.