

# LOAN WAIVER SCHEME AND INDIAN AGRICULTURE

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## INTRODUCTION

We all know about the loan waiver scheme of the Union Budget 2008, we know that there have been many farmer suicides in the recent past, and we also know that Indian agriculture is facing a crisis. Still, there is a lot of criticism about the loan waiver scheme which was designed to provide relief to the ailing rural economy and bring some respite to the distressed farmers. This research paper tries to analyze the loan waiver scheme to figure out the problems in the scheme, and if the scheme is capable of doing what it intends to do.

The huge amount of money that would be spent for this scheme has caught everyone's attention, and that is not the major concern of this paper. As we know, agriculture is of vital importance in Indian socio-economic framework, and with a large population dependent on agriculture, such a huge amount should not be a problem if it is able to provide some relief to the farmers. This paper attempts to explore the potential of the huge amount of government resources spent on this scheme, and if the present use of money is its best possible use.

But we must not forget that Indian agriculture is actually facing a crisis and some measures have to be taken to provide relief. This paper tries to find out the actual problems in Indian agriculture, if the present scheme solves some of these problems, and what steps should have been taken to address these issues.

## EXECUTIVE SUMMARY

The loan waiver scheme of the Union Budget 2008 has some serious flaws, and it is perfectly fine because the outreach of any government measure is limited, and some section of the society would be benefited more than the other. But the most important consideration is the fact that agriculture is facing a serious crisis and some productive measures have to be undertaken by the government in this regard. The present scheme has a very limited number of beneficiaries, and with such huge amount of money the least to be expected by a government scheme is to reach a large number of people.

It seems that the assumptions under which the Finance Minister developed this scheme were flawed, despite the comprehensive committee report of Dr R Radhakrishna on rural indebtedness. The loan waiver scheme targets a selected group of farmers, and the problem is not with the small section of farmers being benefited, but the fact that the potential of such a huge amount of money is enormous and many more could have been benefited.

The major problem in agriculture today is of declining productivity and lack of adequate infrastructure. One reason for low productivity is the increasing cost and improper supply of inputs, which is the result of a under developed marketing network. Unless the farmers have an assured source of income, we can't expect them to get out of this vicious circle of indebtedness. Government policies should stress upon increasing the productivity in agriculture so that the farmers are able to generate enough income to repay their loans.

## RESEARCH OBJECTIVE

The objective of this research is to analyze the loan waiver scheme of the Union Budget 2008, and compare the advantages that the scheme offers with the present situation of Indian agriculture. The research aims to find out if the loan waiver scheme is the best way to provide relief to agriculture, given the present crisis situation in rural India. In the process, the potential of the enormous amount of government resources being used for the loan waiver scheme would be explored.

The research also aims to figure out the actual problem in Indian agriculture and if these problems would be addressed by the loan waiver scheme.

The following questions will be considered during the research:

- What are the drawbacks of the loan waiver scheme?
- Is this scheme the best possible way to address the issues of agrarian crisis?
- Would the loan waiver scheme help to reduce farmer suicides?
- What is the present situation of agriculture in India?
- Are these problems being addressed by the loan waiver scheme?
- What is the alternative use of government resources to improve agriculture?

## RESEARCH METHODOLOGY

The research can be divided into two broad sections:

The first section includes the analysis of the loan waiver scheme. It deals with the pros and cons of the scheme, which includes the identification of various problems in the scheme. It considers the limitations of the scheme and the over emphasis of the benefits that have been assumed by the Finance Minister. The methodology adopted for this purpose was to trace the views of different people on the loan waiver scheme, and talking to some economists, agriculture scientists and journalists who had written about the scheme.

The second section attempts to identify the actual problems in Indian agriculture, and if the loan waiver scheme addresses some of these issues. This was done by reading various committee reports on agrarian crisis, rural indebtedness and farmer suicides. NSSO reports were referred to quantify the findings. This section also explores the alternative uses to which government resources could have been put, which would have increased the number of beneficiaries. For this purpose, the opinion of various experts in the field of agriculture was considered and the cost of these possible alternatives was analyzed.

Unfortunately due to time constraints, field research could not be conducted to get the reaction of farmers to the loan waiver scheme and if they consider it to be the most effective measure to get them out of the present agrarian crisis.

## A1. PROBLEMS WITH THE LOAN WAIVER SCHEME

While reading out the ‘Debt Waiver and Debt Relief’ scheme in his Union Budget 2008 speech, the Finance Minister showed special concern for the indebted farmers, and especially the small and marginal farmers. The opening statement of this scheme makes it clear that the Finance Minister has been working under the assumption that the main problem with Indian agriculture is of indebtedness, and small and marginal farmers are the people hit most badly by this crisis.

### *Identifying the Target Group*

This is the most general perception about the scene of Indian agriculture. Unquestionably, every scheme has to limit its reach, and even if the scheme aims to help the small and marginal farmers, the definition on the basis of the size of land holdings does not make much sense. According to MS Swaminathan<sup>1</sup>, in rain-fed, arid, and semi-arid areas, income from agriculture is very uncertain even for farmers having 4 or 5 hectares of cultivatable land and is closely dependent on the behaviour of monsoon. As Arindam Banik points out, “A small farmer with less land but assured irrigation may be financially better off than another farmer with much larger land holding but no assured irrigation.”<sup>2</sup>

Sharad Joshi<sup>3</sup> finds this idea of identifying the target group by measuring the size of land holdings having ‘very little economic significance’ and makes a point by saying “If agriculture is a losing proposition, the small holder should logically be a smaller loser than the larger holder.”<sup>4</sup>

### *Disappointing for the Farmers*

The role of the informal sector and moneylenders has been completely ignored in this scheme, and this will be dealt with more details in the next section. It is even more discouraging for those ‘honest’ farmers who have taken desperate measures to pay back

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<sup>1</sup> Agriculture Scientist and Rajya Sabha member

<sup>2</sup> Banik, Arindam (2008, March 28). Loan Waiver and Agricultural Investment *The Hindu Business Line*

<sup>3</sup> Founder, Shetkari Sanghatana and Member of Parliament, Rajya Sabha

<sup>4</sup> Joshi, Sharad (2008, March 5). Debt Relief and Waiver Scheme – Effective only if it is total *The Hindu Business Line*

their instalments. CR Sukumar<sup>5</sup> cites the example of a farmer couple who had no money to repay the bank loans due to monsoon failure, but rather than default, they borrowed from local a moneylender at a high cost and paid their loan instalments on time.

Since many farmers borrow from the moneylenders in order to repay their bank loans, it would be very unfair for these farmers to be excluded from the relief scheme. It would be like penalizing the farmers who have been making prompt repayments of their debts honestly. In Sharad Joshi's words, "whether a farmer owes money to the moneylender or to the bank is entirely a matter of accident."<sup>6</sup>

Moreover, as MS Murty<sup>7</sup> (former MD, State Bank of Mysore) points out, the farmers who have invested out of their savings rather than borrowings would be deprived of the benefit of this scheme. Also, the scheme covers only crop loans, and farmers who have invested in infrastructure would be discriminated against even though they have to pay back the loans out of crop yields only. Such farmers would continue to be defaulters and it is very important to make them eligible for fresh loans, so that they can repay the outstanding debt from their income out of new crop yield.

The most important aspect of the indebted farmers is their ineligibility to get fresh loans. The beneficiaries of the loan waiver scheme were eligible for fresh loans only after June 30, and they still could not apply for loans for the kharif season. Further, Ashwin Parekh says that it has not been made clear as to who would provide fresh loans to these farmers in future, because if they approach the same bank, "the present process of risk management would straight away deny them admission."<sup>8</sup>

### ***Discouraging for the Banking Sector***

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<sup>5</sup> Sukumar, CR (2008, July 4). Scheme Brings no relief to conscious debtors *Economy and Politics livemint.com*

<sup>6</sup> Joshi, Sharad (2008, March 5). Debt Relief and Waiver Scheme – Effective only if it is total *The Hindu Business Line*

<sup>7</sup> Murty, MS (2008, March 3). Loan Waiver Sends Wrong Message to Borrowers *The Hindu Business Line*

<sup>8</sup> Bhuva, Rajiv (2008, April 5). Risk Management gets a Waiver *Outlook Business*

“I have decided not to repay my loan instalment this time. Who knows there could be a similar waiver again in view of elections in the state next year?”<sup>9</sup> These are the words of a farmer quoted by CR Sukumar in his article in Mint. Later in the same article, he quotes the deputy manager of Deccan Grameena Bank, Manjulapur. The deputy manager says, “We will be losing that healthy status (of around 98% recoveries) now with not more than 5% recoveries during this season, with farmers preferring not to repay in anticipation of a debt waiver scheme in the near future, in the backdrop of ensuing assembly elections in the state.”<sup>9</sup>

The loan waiver scheme has certainly created a moral hazard situation in the banking sector, with increasing rate of non-repayment. PT Kuppuswamy, the chairman and CEO of Karur Vysya Bank told Mint<sup>10</sup> that many farmers were shifting accounts from their banks to nationalized banks. The cause of this trend was the farmers’ anticipation of a loan waiver in the present election year, and also their fear that they might not get a write off in a private sector bank.

In 1990, there was a loan waiver by the VP Singh government, and it took almost nine years for banks to recover from this scheme worth Rs10000 crore. There was a decline in agricultural loans from cooperative societies and commercial banks soon after the scheme was declared. The main reason for this decline was the fact that the government took some time to write off these loans, and meanwhile those individuals and societies that still had over-dues could not access fresh credit. This scheme had made people unenthusiastic about repaying their loans in anticipation of future write-offs, and the major reason for banks to violate priority sector and other guidelines was the ‘unethical socio-political environment created against the discipline of loan repayments.’<sup>11</sup> The situation seems to be very similar to the one that exists now.

### ***Politically Unsound***

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<sup>9</sup> Sukumar, CR (2008, July 4). Scheme Brings no relief to conscious debtors *Economy and Politics* [livemint.com](http://livemint.com)

<sup>10</sup> Kasbekar, Mehak (2008, June 2). Does Loan Waiver Harm Credit Culture? *Economy and Politics* [livemint.com](http://livemint.com)

<sup>11</sup> Dev, S M (2008, April 12). Agriculture : Absence of a big push *Economic & Political WEEKLY* pg 36

This scheme has created a discontent among the non-beneficiary group of farmers and amongst most of the urban people, even if they are not aware about the details of this scheme. Only a part of the 27% of the farmers indebted to formal sources will benefit, and around 80% of the farmers will not be happy with the government's effort for the agriculture sector. Also, the statement made by Prime Minister that the scheme was a correction of the previous government's failure does not make much sense in the fifth year of the term of his government.

So, the scheme clearly has many loopholes even on the political front and from the vote-bank point of view. Sharad Joshi makes a very important point by saying, "It is rather remarkable that the UPA government, which does not accept the theory of 'creamy layer' for the backward classes, is trying to use the same doctrine for farmers who are, as it is, in such desperation that they prefer death to the ignominy of living."<sup>12</sup>

## A2. OVEREMPHASIS OF THE BENEFITS

### ***Role of informal sector lending***

First of all, it is important to note the importance of moneylenders in the rural economy, which have been completely ignored in this scheme. The following table<sup>13</sup> shows the All-India data on the 'distribution of outstanding loans by source of loan for each size class of land possessed by farmer households.'

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<sup>12</sup> Joshi, Sharad (2008, March 5). Debt Relief and Waiver Scheme – Effective only if it is total *The Hindu Business Line*

<sup>13</sup> Table 3 of 'NSS Report no. 498: Indebtedness of Farmer Households, 2003'

All India											
size class of land possessed	source of loan									no. of farmer hhs having outstanding loan	
	government	co-operative society	bank	agricultural/ professional money lender	trader	relatives & friends	doctor, lawyer and other professionals	others	all	estd. (00)	sample
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
< 0.01	19	53	154	473	40	231	10	20	1000	5708	1220
0.01 – 0.40	40	145	248	318	49	149	14	37	1000	130112	8538
0.40 – 1.00	38	170	320	308	46	91	7	20	1000	129211	5702
1.01 – 2.00	17	205	354	259	42	88	8	26	1000	81920	3906
2.01 – 4.00	15	226	410	234	47	51	4	14	1000	54409	2676
4.01 – 10.00	13	230	445	167	61	56	15	12	1000	27734	1633
10.00+	17	232	427	172	106	40	0	6	1000	5148	260
all sizes	25	196	356	287	52	85	9	21	1000	434242	23935
estd. no. of farmer hhs (00)	14769	114785	117100	125000	53902	77602	7181	14605	434242	x	x
sample no. of farmer hhs	992	5844	6296	6919	3018	4528	345	872	23935	x	x

It is clear from the table that the role of ‘agricultural / professional moneylender’ is more important for farmers with lower land holdings. Informal sources of credit outweigh the formal sources in case of farmers with up to 0.40 hectares of land. Apart from the moneylenders, there are a lot of other informal sources that farmers approach for their credit needs.

Informal lending is a peculiar phenomenon in Indian agriculture, and as Arindam Banik points out, “Farmers, on an average, borrow much larger amounts from commission agents or traders than workers do from employers or tenants from landlords”<sup>14</sup>. Still, the problem of indebtedness due to informal sector lending is not considered in the loan waiver scheme.

From the above table, we can also see that there are a considerable number of the estimated farmer households having outstanding loans with more than 2 hectares of land, and these farmers will not be benefited from the scheme.

### ***Non-productive use of credit***

It seems that a major reason for the increasing number of defaulter farmers is the use of credit for non-productive non-agricultural purposes. Farmers can never repay a loan if a major portion of loan credit is used for unproductive purpose. The following table<sup>15</sup> shows All-India data on the ‘distribution of outstanding loans by purpose of loan for each size class of land possessed by farmer household.’

<sup>14</sup> Banik, Arindam (2006, June 20). Farmer Suicides: Beyond the Obvious *The Hindu Business Line*

<sup>15</sup> Table 2 of ‘NSS Report no. 498: Indebtedness of Farmer Households, 2003’

All India												
size class of land possessed	purpose of loan									no. per 1000 of indebted hhs	estd. no. of farmer hhs (00)	sample no. of farmer hhs
	capital expenditure in farm business	current expenditure in farm business	non-farm business	consumption expenditure	marriages and ceremonies	education	medical	other expenditure	all			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
< 0.01	151	57	77	212	224	3	130	147	1000	453	12594	2598
0.01 – 0.40	133	95	123	146	201	10	72	220	1000	444	292867	19116
0.40 – 1.00	241	227	103	105	133	13	41	137	1000	456	283610	13373
1.01 – 2.00	326	320	46	87	99	5	24	93	1000	510	160600	8627
2.01 – 4.00	388	347	47	50	89	7	13	59	1000	582	93504	4973
4.01 – 10.00	411	398	23	59	50	5	12	41	1000	651	42581	2696
10.00+	457	325	32	48	29	15	37	57	1000	664	7748	387
all sizes	306	278	67	88	111	8	33	108	1000	486	893604	51770
estd. no. of farmer hhs (00)	105262	158564	22222	101526	49556	3951	28467	45596	434242	x	x	x
sample no. of farmer hhs	5453	7432	1598	6300	2666	275	1597	3001	23935	x	x	x

The table shows that for farmers with up to 1 hectare of land, the non-agricultural spending of the loan amount is more than the agricultural spending. And for all farmers in general, around 40% of loan amount is used for non productive purpose. In short, large amount of money is spent on non income generating activities, and with this sort of spending pattern one can't repay the borrowed amount. So, the loan waiver scheme might be good for 'farmers' as individuals, but not for 'agriculture'.

This table also shows that a considerable number of farmer households with larger land holdings are indebted.

### ***Over emphasis of credit***

Credit has been given too much emphasis in agriculture, and it should be realized that credit alone can not solve the problems of agriculture, and it is very important to ensure timely inputs and technology, along with improved market opportunities. The following table<sup>16</sup> shows data on the 'Trend growth rate in area, input use, credit and capital stock in agriculture during 1980-81 to 2003-04'.

<sup>16</sup> Table 7.6 of 'Economic Survey 2007-08'

Period	1980-81 to 1990-91	1990-91 to 1996-97	1996-97 to 2005-06
Technology <sup>a</sup>	3.3	2.8	0.0
Public sector net fixed capital stock	3.9	1.9	1.4 <sup>b</sup>
Gross irrigated area	2.3	2.6	0.5 <sup>c</sup>
Electricity consumed in agriculture	14.1	9.4	-0.5 <sup>c</sup>
Area under fruits and vegetables	5.6	5.6	2.7 <sup>c</sup>
Private sector net fixed capital stock	0.6	2.2	1.2 <sup>b</sup>
Terms of trade	0.2	1.0	-1.7 <sup>b</sup>
Total net fixed capital stock	2.0	2.1	1.3 <sup>b</sup>
NPK use	8.2	2.5	2.3
Credit supply	3.7	7.5	14.4 <sup>b</sup>
Total cropped area	0.4	0.4	-0.1
Net sown area	-0.1	0.0	-0.2
Cropping intensity	0.5	0.4	0.1

<sup>a</sup> Yield potential of new varieties of paddy, rapeseed/mustard, groundnut, wheat, maize  
<sup>b</sup> Up to 2003-04.    <sup>c</sup> Up to 2004-05

The table shows that credit is the only factor that has been growing in Indian agriculture over the years, with all other factors of production showing a declining trend. This is a major contributor for the increasing number of default rates, as the farmers do not get the expected yield due to poor quality of inputs.

### ***Other concerns***

The benefits of the loan waiver scheme would be very short-term, and the same problem of indebtedness might arise in the next season also. This is because the need for credit would never end, and due of the lack of a long-term solution in this approach, the productivity and the yield will not increase and many farmers would continue to be defaulters.

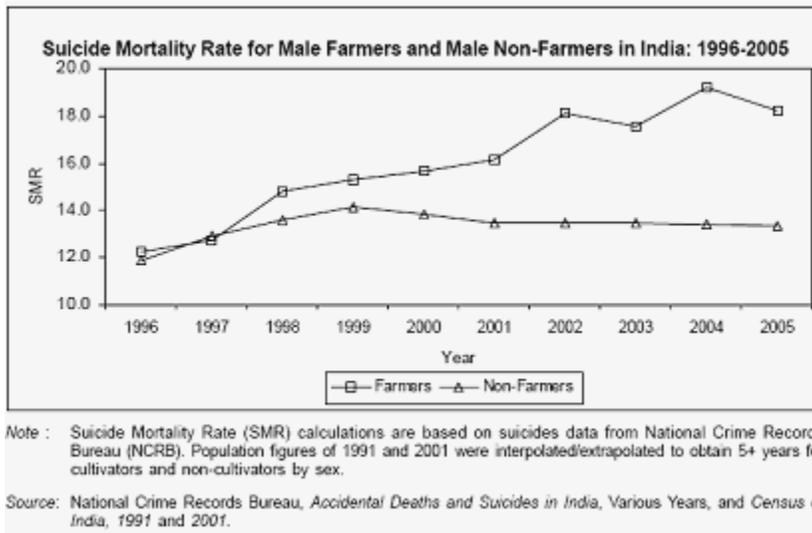
M Sitarama Murty points out that “where the rural infrastructure is good, the plight of farmers reduce(s) and productivity is better.”<sup>17</sup> According to Chukki Nanjundaswamy, who fights for women farmers in Karnataka, “Loan waiver is an attempt to cure the symptom and not the disease.”<sup>18</sup>

<sup>17</sup> Murty, MS (2008, March 3). Loan Waiver Sends Wrong Message to Borrowers *The Hindu Business*

<sup>18</sup> Big Karnataka farmers call loan waiver discriminatory (2008, March 1). Retrieved June 2, 2008 from [http://in.news.yahoo.com/indiaabroad/20080301/r\\_t\\_ians\\_bs\\_budget08/tbs-big-karnataka-farmers-call-loan-waiv-6276fdc.html](http://in.news.yahoo.com/indiaabroad/20080301/r_t_ians_bs_budget08/tbs-big-karnataka-farmers-call-loan-waiv-6276fdc.html)

### A3. FARMER SUICIDES

There is no denying of the fact that farmer suicide is an issue that has to be dealt with. The following figure<sup>19</sup> compares the ‘Suicide Mortality Rate for Male Farmers and Male Non-Farmers in India: 1996-2005’. It shows that the ‘Suicide Mortality Rate’ for male farmers is much more than that for male non-farmers and unfortunately, the trend of farmer suicides is increasing.



It wouldn't be wrong to say that the issue of 'Rural crisis' was brought up into limelight after the increasing cases of farmer suicides. Thus, all short term policy measures designed by the government should ideally address the problems faced by these farmers in order to provide instant relief. There can be no other possible justification for adopting a short term policy instrument.

The report by Tata Institute of Social Sciences (TISS) on 'Causes of Farmer Suicides in Maharashtra' identifies the heavy rural indebtedness as the major reason behind the suicides but more importantly, the report says that indebtedness arises from a mismatch between the cost of production and the market prices. So, in order to get farmers out of this indebtedness induced suicide trap, improving the market mechanism would be

<sup>19</sup> Figure 4.1 of R Radhakrishna Committee Report

crucial. Cost of inputs has also gone up drastically after the increase of pest attacks 1995 onwards, and thus the increasing need for application of pesticides.

Unfortunately, the loan waiver scheme fails to address the issues faced by most of the farmers that have committed suicides. The short term policy of the government should have ideally targeted these problems in order to put an end to the increasing trend of farmer suicides. The following table<sup>20</sup> gives the data of ‘Size-class of Land Owned in Suicide Case Households’.

Size-class of Land Owned in Suicide Case Households		
Size-class of Land	%	Average Land
Marginal (0-2.5 acres)	14.4	2.1
Small (2.5-5 acres)	38.7	3.9
Semi-medium (5-10 acres)	20.7	7.4
Medium (10-20 acres)	15.3	13.1
Large (20+ acres)	3.6	30.0
Not available	7.2	-
Total	100.0	6.9
Gini		0.380
Note: % is from number of households, N=111. District wise distribution is given in 4.3a in Annexure 5.		

There are a considerable number of farmers who have committed suicides and own more than 5 acres (around 2 hectares) of land. It is clear from the above table that the problems of a large number of farmers have not been considered and they have been ignored in the loan waiver scheme. The TISS report also points out that farmers commit suicide when they seem to have exhausted all avenues of securing support. This means that the landless labourers are even more vulnerable as they do not even have the option to sell land. There is no respite for the landless labourers in the loan waiver scheme.

<sup>20</sup> Table 4.3 of ‘Suicide of Farmers in Maharashtra’ Mishra, Srijit (2006, January 26). Indira Gandhi Institute of Development Research

## B1. PROBLEMS IN AGRICULTURE

### *Deceleration in growth rate*

In 2004-05, the share of agriculture in GDP was 20.2% with 56.5% work force dependent on agriculture for employment. The following table<sup>21</sup> shows the declining trend in the growth rate of agriculture, while industry and service sector have been growing rapidly.

(1999-2000 prices)

Year	Agriculture	Industry	Services	GDP at factor cost	Per capita NNP at factor cost
1980-81 to 1990-91	3.08	5.79	6.54	5.15	2.82
1992-93 to 2002-03	2.61	5.82	7.65	5.85	3.89
1992-93 to 2005-06	2.57	6.05	7.72	6.00	4.10
1950-51 to 2005-06	2.54	5.19	5.40	4.26	1.94

Note : Growth is Compound Annual Growth Rate, NNP denotes Net National Product.

Source : CSO, *National Accounts Statistics*, Various Years

As mentioned earlier in this paper, credit in agriculture has been given too much importance while other factors responsible for productivity have been ignored. The finance minister also assumes indebtedness to be the major cause of distress amongst farmer households, but according to the ‘Report of Expert Group on Indebtedness’ chaired by R Radhakrishna, indebtedness is just a symptom and not the root cause of this crisis, and the committee report says that average farmer household borrowing has not been excessive. According to the committee report the factors contributing to this crisis are “stagnation in agriculture, increasing production and marketing risks, institutional vacuum and lack of alternative livelihood opportunities.” The deceleration in the growth rate of agriculture is evident in the above table.

### *Decreasing Yield*

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<sup>21</sup> Table 1.7 of R Radhakrishna Committee Report

A major problem ailing Indian agriculture is the declining efficiency of input use and thus, adversely affecting the yield. The following table<sup>22</sup> on ‘Growth of Area, Production and Yield of Major Crops in India: 1980-81 to 2003-04’ displays this negative trend.

Crop	1980-81 to 1990-91			1990-91 to 2003-04		
	Area	Prdn	Yield	Area	Prdn	Yield
Rice	0.40	3.56	3.47	0.15	1.14	0.99
Wheat	0.46	3.57	3.10	0.74	2.13	1.35
Coarse Cereals	-1.34	0.40	1.62	-1.58	0.25	1.87
Total Cereals	-0.26	3.03	2.90	-0.25	1.32	1.58
Total Pulses	-0.09	1.52	1.61	-0.87	-0.74	0.16
Foodgrains	-0.23	2.85	2.74	-0.44	1.16	1.11
Sugarcane	1.44	2.70	1.24	1.41	1.22	-0.16
Oilseeds	1.51	5.20	2.43	-1.07	0.18	1.26
Cotton	-1.25	2.80	4.10	0.82	0.15	-0.69
Non-Foodgrains	1.12	3.77	2.31	-0.09	1.20	0.62
All Crops	0.10	3.19	2.56	-0.25	1.58	0.90

Note : Growth is Compound Annual Growth Rate. Prdn denotes Production.

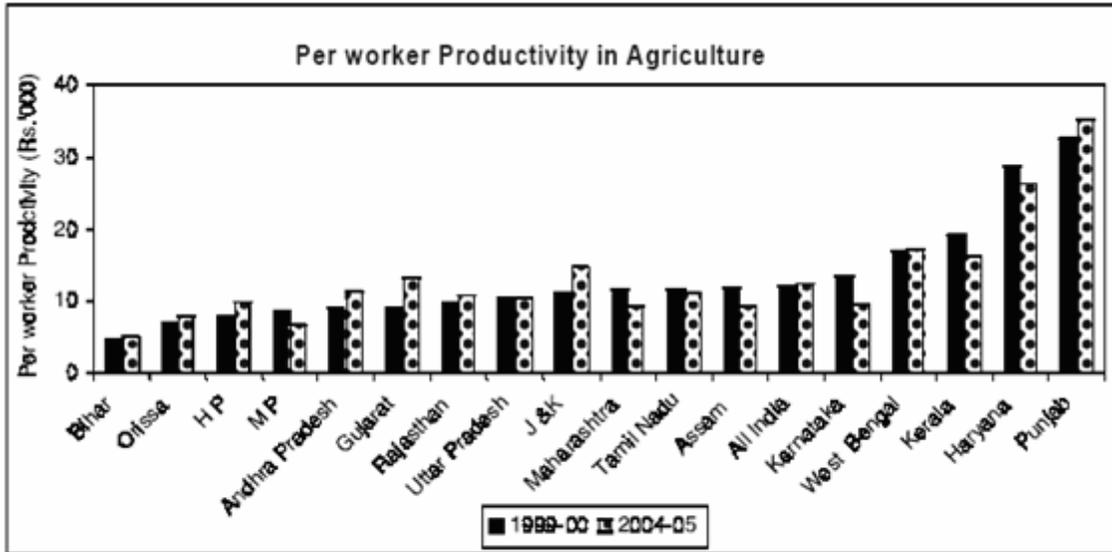
Source : Ministry of Agriculture, *Area and Production of Principal Crops in India, Various Years*

This declining trend of annual growth rate of yield might affect the profitability in agriculture. According to MS Swaminathan, “The prevailing gap between potential and actual yields in the crops of rain-fed areas such as jowar, bajra, millets, pulses, and oilseeds is over 200 per cent even with the technologies on the shelf”, and the benefits of the loan waiver scheme would be fully realised only if the farmers are “supported with synergetic packages of technology, services, marketing infrastructure, and public policies related to input and output pricing.”<sup>23</sup>

### ***Productivity in Agriculture***

<sup>22</sup> Table 1.9 of R Radhakrishna Committee Report

<sup>23</sup> Swaminathan, MS (2008, March 10). Looking beyond Farmers’ Suicides and Loan Waivers *Mainstream*



Source : NSSO, *Employment and Unemployment Situation in India* and CSO, *Gross State Domestic Product, Various Years*.

The above figure<sup>24</sup> shows near stagnation in ‘per worker productivity in agriculture’, with some states exhibiting a declining trend. This trend of falling productivity can lead to negative consequences for agriculture and should be checked. What makes this issue even more important is the fact that the per-worker productivity in non-agriculture sectors has been growing much faster than that in agriculture. The situation is same for all Indian states, as the following table<sup>25</sup> shows.

<sup>24</sup> Figure 1.5 of R Radhakrishna Committee Report

<sup>25</sup> Table 1.10 of R Radhakrishna Committee Report

**Per Worker Productivity in Agriculture and Non-Agriculture – Various States: 2004-05**

State	Agriculture (Rs.)	Non-Agriculture (Rs.)	Non-Agriculture/ Agriculture
Andhra Pradesh	11,245	56,414	5.02
Assam	9,205	49,592	5.39
Bihar	4,862	22,392	4.61
Gujarat	12,934	104,512	8.08
Haryana	26,192	85,128	3.25
Himachal Pradesh	9,796	69,818	7.13
Jammu & Kashmir	14,672	45,400	3.09
Karnataka	9,653	82,316	8.53
Kerala	16,139	56,318	3.49
Madhya Pradesh	6,606	44,980	6.81
Maharashtra	9,130	106,912	11.71
Orissa	7,871	41,341	5.25
Punjab	35,087	70,138	2.00
Rajasthan	10,609	56,830	5.36
Tamil Nadu	10,789	58,793	5.45
Uttar Pradesh	10,367	42,683	4.12
West Bengal	17,113	60,307	3.52
All India	12,371	61,432	4.97
CV for States	57.24	36.27	

Note : CV denotes Coefficient of Variation

Source : NSSO, *Employment and Unemployment Situation in India, 2004-05* and CSO, *Gross State Domestic Product, 2004-05*.

***Availability of timely input and information***

The main problem with over-emphasising the provision of credit and not considering other factors, like provision of timely inputs, is the fact that even if farmers have credit, it would be of no use to them if they are not able to purchase seeds, fertilizers, pesticides etc. from the money they have. This hampers productivity with the actual yield being less than the expected yield. The following table<sup>26</sup> has the data for the kharif season showing the number of farmer households using fertilizers, the number of farmer households using it on time, and the number of farmer households not being able to use the resource on time.

<sup>26</sup> Table 14 of 'NSS Report No 496: Some Aspects of Farming, 2003'

State/ UT	season: kharif			fertiliser	
	per 1000 no. of farmer hhs using resource	per 1000 no. of farmer hhs using resource in time	per 1000 no. of farmer hhs using resource but not in time	no. of hhs using resource	
	(2)	(3)	(4)	estd. (00)	sample
(1)				(5)	(6)
Andhra Pradesh	808	802	6	48759	2506
Assam	225	144	82	277	141
Bihar	620	582	38	15510	1287
Chhattisgarh	888	804	83	62852	3333
Goa	693	684	9	19131	774
Gujarat	806	801	5	30510	936
Haryana	532	527	6	10352	488
Himachal Pradesh	813	779	39	7413	921
Jammu & Kashmir	914	855	61	8641	831
Jharkhand	795	780	17	23480	1129
Karnataka	855	819	36	34540	1612
Kerala	611	610	2	13418	1169
Madhya Pradesh	589	580	10	37244	1556
Maharashtra	884	864	20	58210	2746
Manipur	488	460	28	1048	515
Mizoram	417	400	16	1058	295
Nagaland	271	118	183	235	133
Nagaland	243	215	28	196	77
Odisa	751	725	35	32189	1531
Punjab	541	540	2	9985	607
Rajasthan	597	584	13	31720	1441
Sikkim	311	270	42	165	179
Tamil Nadu	717	711	6	27902	1690
Tripura	797	367	426	1851	835
Uttar Pradesh	780	769	11	133892	4993
Uttarakhand	535	493	42	4794	217
West Bengal	889	870	19	61542	3331
Group of UTs	673	653	10	493	273
All-India	757	735	23	675939	35623

The table shows that around 75% farmer households use fertilizers, and only 73.5% are able to use it when required. An important reason for the farmers not using various modern methods of technology is lack of awareness among them about the existence of these resources. The following table<sup>27</sup> shows the percentage of farmer households obtaining information on cultivation from any source (extension worker, TV, Radio, Newspaper, Input Dealer, and Other Progressive Farmers). All over India, only around 40% farmer households access some source for getting information on modern methods of farming, out of which less than 60% get information on improved seeds, less than 50% get to know about fertilizer application, while only 24% get information on plant protection.

<sup>27</sup> Statement 4.4 of 'NSS Report No 499: Access to Modern Technology for farming, 2003'

State/UT	% of hhs accessing any source	% of such hhs obtaining information on cultivation	per thousand number of such households getting information from any source on		
			improved seed/variety	fertilizer application	plant protection
Andhra Pr.	62.7	97	436	549	340
West Bengal	60.9	97	480	614	308
Kerala	58.0	92	382	486	411
Gujarat	55.2	93	712	606	282
Tamil Nadu	50.0	92	509	570	312
J & K	48.0	95	421	459	289
Maharashtra	46.2	98	800	462	233
Assam	46.1	97	493	515	194
Karnataka	44.3	97	707	450	188
Madhya Pr.	41.4	99	713	417	179
Haryana	37.0	91	760	333	259
Uttar Pr.	33.6	96	720	421	185
Bihar	32.4	97	451	588	172
Jharkhand	28.4	96	430	524	169
Punjab	26.7	86	732	338	168
Orissa	25.6	96	406	570	187
Chhattisgarh	25.0	98	528	521	154
Rajasthan	14.7	97	787	223	96
<b>India</b>	<b>40.4</b>	<b>96</b>	<b>596</b>	<b>494</b>	<b>240</b>

### ***Water Management***

According to Arindam Banik, the share of input subsidies in public expenditure was 44% in the early 1980s and it rose to 83% by 1990, but “The increasing shares of total public expenditure on agriculture are allocated to input subsidies (on fertilisers, electricity, irrigation, and credit, for example), rather than to productivity-enhancing investments such as research and public investment in irrigation.”<sup>28</sup> Irrigation is of vital importance in agriculture and an individual can not invest in creating infrastructure for the same. The following table<sup>29</sup> shows ‘Net Irrigated Area by Sources’.

<sup>28</sup> Banik, Arindam (2008, March 28). Loan Waiver and Agricultural Investment *Business Line*

<sup>29</sup> Table 1.5 of R Radhakrishna Committee Report

(’000 Hectares)

Year	Canals		Tanks	Tube Wells & Other Wells	Other	Total Sources	NIA/NSA (%)
	Government	Private					
1950-51	8300		3600	6000	3000	20900	17.56
1990-91	16973	480	2944	24694	2932	48023	33.41
1995-96	16561	559	3118	29697	3467	53402	37.55
1999-00	16366	195	2574	34581	3046	56761	40.23
2000-01	15789	199	2524	33277	2892	54682	38.75
2000-01 Share (%)	28.87	0.36	4.62	60.86	5.29	100.00	

Note : NIA denotes Net Irrigated Area and NSA denotes Net Sown Area

Source : Ministry of Statistics and Programme Implementation, *Statistical Abstract of India, 2004*.

The most important statistic in the table is ‘Net Irrigated Area/Net Sown Area’ which determines the percentage of irrigated area. It shows that in 2000-01, less than 39% of area was under irrigation. Water management is a very important issue and assured irrigation can drastically change the scene of Indian agriculture.

### ***Other problems***

Sharad Joshi feels that it is very important to open up the economy for agriculture so that the farmers in India become globally competitive. He says that while “some of the farmers have to undergo the rather excruciating process of shifting to new jobs. But we have to open up if our farmers have to learn new skills and new technology.”<sup>30</sup> He said that he would prefer to pay for electricity and get it when he needs it, rather than getting subsidised electricity at midnight. Alan Greenspan also says that “government in recent years has expended more than 4 per cent of GDP on subsidies, mainly on food and fertiliser, while state subsidisation of power and irrigation has added measurably more.”<sup>31</sup>

There is another very important in agriculture that has been put forth by Arindam Banik<sup>32</sup>. He says that the farmer is generally required to repay the debt immediately after the harvest and as he has no other means of repaying the debt, he is forced to sell the produce immediately after the harvest. But as all the farmers sell their produce at the same time (i.e. immediately after harvest) the farmers receive less for their produce than

<sup>30</sup> Open Doors Policy is good for farmers (2000, April 8) *The Hindu Business Line*

<sup>31</sup> Srinivasan, TN (2007, November 21). Greenspan’s prescription for India – II: Break the Bureaucratic Stranglehold *The Hindu Business Line*

<sup>32</sup> Banik, Arindam (2006, June 20). Farmer Suicides: Beyond the Obvious *The Hindu Business Line*

what they could have obtained at a later stage in the market. This is because at the time of harvest, there is an excess supply in the market and the prices are driven down. There is an urgent need to devise a mechanism to take care of this issue, because farmers are not able to reap the full benefits of their labour.

## B2. ALTERNATIVE USE OF RESOURCES

When asked about the overlooking of informal sector lending in the loan waiver scheme, in an interview with The Hindu the Finance Minister replied that “What can I do about that? Can anyone quantify how much he has taken? The point is we can do what is doable. There’s no point picking the undoable against the doable and then saying don’t do the doable. That’s a very strange argument.” There is no disagreement with the remarks made by the Finance Minister, but there could have been an alternative use of the huge amount of government resources that have been spent on the loan waiver scheme, to help all the farmers in general that are suffering due to the ‘Agricultural Crisis’.

It is a well known fact that the current scheme provides only a very short term relief, with a very limited outreach and it does not cater to the problems of agriculture. S Mahendra Dev writes that “The budget should have given a large push to core issues like public investment in infrastructure, land and water management including rain water conservation and watershed development, research and extension, price stabilisation etc, to make cultivation viable and profitable.”<sup>33</sup>

There is no doubt that agriculture could have benefited more if the same amount had been used for development of infrastructure. Following comparisons are made just to show the enormous potential of Rs72000 crore.

### ***Laser Land Levelling***

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<sup>33</sup> Dev, S M (2008, April 12). Agriculture : Absence of a big push *Economic & Political WEEKLY* pg 36

Apart from the various benefits of land levelling, environmental concerns at some places make land levelling the need of the hour. According to the Department of Soil and Water Conservation (Punjab), out of 141 blocks of the state more than 100 are over exploited due to excessive pumping of ground water. This is evident from the fact that area having water table below 30 feet depth has increased from 3% in 1973 to 90% in 2004. Levelling of land can make the situation better because around 20-25% of irrigation water is lost during application if the land is not level.

Apart from non-optimal use of water, uneven fields have uneven crop stands, increased weed burden and uneven maturing of crops. All these factors lead to reduction in yield and also affect the quality of grain. Level land improves water coverage that.<sup>34</sup>

- Improves crop establishment.
- Reduces weed problems.
- Improves uniformity of crop maturity.
- Decreases the time to complete tasks.
- Reduces the amount of water required for land preparation.

The following table<sup>35</sup> shows ‘The additional cost and financial benefit from land levelling’.

Year	1	2	3	4	5	6	7	8
<b>Additional cost (\$/ha)</b>								
Leveling	50	10	0	0	0	0	0	0
Plowing	15	0	0	0	0	0	0	0
Fertilizer	13	6	0	0	0	0	0	0
<b>Financial benefit (\$/ha)</b>								
Grain yield	53	53	53	53	53	53	53	53
Reduction in weeding	8	8	8	8	8	8	8	8
Cumulative cash flow	-17	38	99	160	221	282	343	404

<sup>34</sup> Rickman, JF (2002). Manual for laser land leveling, Rice-Wheat Consortium Technical Bulletin Series 5. New Delhi-110 012, *India: Rice-Wheat Consortium for the Indo-Gangetic Plains*. pp.24

<sup>35</sup> Table 3 of Rickman, JF (2002). Manual for laser land leveling, Rice-Wheat Consortium Technical Bulletin Series 5. New Delhi-110 012, *India: Rice-Wheat Consortium for the Indo-Gangetic Plains*. pp.24

The data in the above table clearly shows that in the long run, laser land levelling makes economic sense. A study done by Punjab Agriculture University (Ludhiana) showed that average increase in crop yield due to levelling of land was 24%. The data is summarised in the following table<sup>36</sup>

Year	Rice Yield(t h/a)	
	Levelled Fields	Unlevelled Fields
1996	3.40	2.67
1997	2.27	1.46
1998	2.72	2.36
1999	2.34	2.00
<b>Average</b>	<b>2.72</b>	<b>2.19</b>

Source: PAU, Ldh

According to a proposal by the Department of Soil and Water Conservation (Punjab), 500 laser levellers would level 2 lakh hectares of land in 5 years. This means that 1 machine set would be able to level 400 hectares of land. The cost of a machine set and a tractor is assumed to be Rs8 lakh in the proposal. Total agricultural land<sup>37</sup> in India is 169739000 hectares, and the cost of levelling the total agricultural land in India would come out to be Rs33947 crore. This is not a very rational estimate because it is more costly to level land at some difficult terrains, but again, this is the cost of levelling all the agricultural land in India with the cost of tractor also included.

### ***Building Roads***

<sup>36</sup> Laser Levelling Resource Conservation through laser levelling, Department of soil and water conservation, Punjab

<sup>37</sup> From Table 7.4 of 'Agricultural Statistics at a Glance 2004-04'

Unarguably, construction of roads is considered to be the responsibility of the state. A study by National Bank for Agriculture and Rural Development (NABARD) called ‘An Impact Assessment of Investments in Rural Roads & Bridges under RIDF’,<sup>38</sup> highlights the benefits of developing roads. So, building of roads with the money that has been used for the loan waiver scheme can also be considered as an alternative. The average cost of building one kilometre of road is Rs12.21 lakh.

The study observed that improved accessibility due to investment in rural roads gave the farmers a chance to learn about modern agro-economic practices and improved the accessibility to input markets. Another important consequence of construction of roads was the reduction in transport costs. Improved condition of farmers also led to the development of non-farm sector in the benefited areas.

The following table<sup>39</sup> shows the data for Punjab for the ‘Yield of Major Crops’ before and after the construction of New Link Roads and reconstruction of roads. It seems that the roads have proved to be beneficial for the yield of most of the crops.

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<sup>38</sup> NABARD (2004) *Infrastructure for Agriculture and Rural Development An Impact Assessment of Investment in Rural Roads & Bridges under RIDF*

<sup>39</sup> Table A.2 of NABARD (2004) *Infrastructure for Agriculture and Rural Development An Impact Assessment of Investment in Rural Roads & Bridges under RIDF*

(Qt/Acre)

Crop	New Link Roads				Reconstructed Roads			
	Marginal/Small		Medium/Large		Marginal/Small		Medium/Large	
	Before	After	Before	After	Before	After	Before	After
Paddy	12.86	12.85	13.01	13.52	12.95	12.98	13.71	13.85
Cotton	0.91	1.26	1.04	1.55	1.01	1.21	1.06	1.58
Fodder	160.00	172.00	171.00	190.00	162.00	187.00	175.00	193.00
Sugarcane	22.14	25.06	24.03	26.45	-	25.15	24.17	26.51
Vegetables	1.34	1.65	-	1.69	1.37	1.70	1.41	1.75
Wheat	15.04	17.75	17.13	19.02	15.19	17.85	17.75	19.21
Mustard	3.77	4.23	5.89	6.45	3.82	4.35	6.01	7.67
Potato	68.85	72.11	75.27	82.10	70.15	75.25	76.77	88.17

The following table<sup>40</sup> shows the 'Indirect Employment Effect' after the construction of roads. The data shows that there has been a considerable increase in non-farm opportunities after the construction of roads, and any scheme that is capable of benefiting both the farmers and non-farmers should be carried forward without any hesitation.

<sup>40</sup> Table 10.5 of NABARD (2004) *Infrastructure for Agriculture and Rural Development An Impact Assessment of Investment in Rural Roads & Bridges under RIDF*

(person-years)

Sector	Before	After	Growth (%)
Transport			
Motorised	20	285	1325.00
Non-motorised	34	8	-76.47
Total	54	293	442.59
Market / Trading			
Near the bridge	6	10	66.67
Trisulia bazar	78	182	133.33
Total	84	192	128.57
Industry			
Brick kiln	160	755	372.69

## C. CONCLUSION AND RECOMMENDATIONS

Undoubtedly, the most important concern in Indian agriculture is the lack of adequate investment. This is evident in the following table<sup>41</sup> which shows the investment in agriculture.

	<i>Gross Capital Formation</i>				<i>% Share of</i>			<i>Invest. In Agri. as % of GDP</i>
	<i>Agriculture</i>	<i>Total economy</i>	<i>Public sector in Agri.</i>	<i>Pvt. sector in Agri.</i>	<i>Public sector in Agri.</i>	<i>Pvt. sector in Agri.</i>	<i>Agri. To total</i>	
1993-94	13523	181133	4467	9056	33.0	67.0	7.47	1.6
1994-95	14969	229879	4947	10022	33.0	67.0	6.51	1.6
1995-96	15690	284557	4849	10841	30.9	69.1	5.51	1.6
1996-97	16176	248631	4668	11508	28.9	71.1	6.51	1.5
1997-98	15942	256551	3979	11963	25.0	75.0	4.77	1.4
1998-99	14895	243697	3869	11026	26.0	74.0	6.11	1.3
1999-00	16582	268374	4112	12470	24.8	75.2	6.18	1.3
2000-01	16545	274917	4007	12538	24.2	75.8	6.02	1.3

Source: Planning Commission, 10<sup>th</sup> Plan Documents

Large scale investment in agriculture has to be taken up by the state as the private sector does not have the capacity to undertake such huge investment, and also there is no incentive for an individual to take up such investment that falls under the category of public good. If the infrastructure in agriculture is in its place, we can hope to see more private corporate companies coming up in agriculture, which would be beneficial for the farmers. This would incorporate the farmers in the mainstream and it might put an end to the incessant subsidies in agriculture.

Talking of rural credit, as mentioned earlier also, just the provision of credit will not end all the problems in agriculture. M Sitarama Murty puts forward this view by saying that it would be a “fallacy to believe that credit or its waiver alone can mitigate the problems of the afflicted farmers. Timely availability of the right kind of fertilizers, genuine and quality seeds is very important. The marketing component of the chain is weak and the

<sup>41</sup> Table 22 of TISS (2005, March 15). *Causes of Farmer Suicides in Maharashtra: An Enquiry*

Government can improve the storage, transport and processing facilities of grains, fruits and vegetables and prevent distress sale of produce.”<sup>42</sup>

As S Mahendra Dev puts it, the most important need in agriculture is the provision of “measures for raising output and good prices for production rather than more credit which, in the absence of viable agriculture, push them back into a debt trap. The issue is not that of availability of institutional credit, but access, ease, and terms and conditions of such finance.”<sup>43</sup> The C Rangarajan committee report on Financial Inclusion says that 46 million farmer households out of 89 million households do not access credit, either from institutional or non-institutional sources. Venkitesh Ramakrishnan<sup>44</sup> quotes a study, which says that in large parts of Uttar Pradesh (especially Bundelkhand and eastern UP) instruments of formal credit delivery hardly ever lend money to small or marginal farmers.

Sharad Joshi feels that the loan waiver scheme was not designed by keeping the interest of farmers in mind, and if it was so, then the “Finance Minister would have first tried to correct market imperfections so that the farmers are not driven to the trap of indebtedness once again.”<sup>45</sup> The indebtedness to moneylenders is another important issue, and Agriculture Minister was ready with a solution to this complex problem. He said the since the moneylenders are illegal, the farmers need not repay them. Before considering this option, it is important to realize that the informal moneylenders are a part of the traditional Indian agrarian society. Moneylenders have survived for the very basic fact that they hold a ‘comparative advantage’ in this business, which they have been doing for generations now. More importantly, they fulfil the credit needs of the farmers in case of institutional vacuum, and it would be unethical to ask the farmers not to repay them as they are illegal.

It is important to note that all the above recommendations are long term measures, and even if indebtedness is not the major cause of agrarian crisis and is just a symptom, it is

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<sup>42</sup> Murty, MS (2008, March 3). Loan Waiver Sends Wrong Message to Borrowers *The Hindu Business*

<sup>43</sup> Dev, S M (2008, April 12). Agriculture : Absence of a big push *Economic & Political WEEKLY* pg 36

<sup>44</sup> Ramakrishnan, Venkitesh (2008, March 28). In the Moneylender’s Grip *Front Line*

<sup>45</sup> Joshi, Sharad (2008, March 5). Debt Relief and Waiver Scheme – Effective only if it is total *The Hindu Business Line*

still a cause of distress among farmer households and there has to be a short term measure to take care of this issue. The recommendations of the ‘Report of Expert Group on Indebtedness’ of immediate measures to be undertaken to solve the problem of rural indebtedness are very relevant. It says:

#### Rescheduling of Loans of Farmers Affected by Natural Calamities<sup>46</sup>

The central and state governments have programmes of rescheduling loans to farmers affected by natural calamities like floods and cyclones with a view to reviving the livelihood base of the affected families. The Expert Group recommends that:

- a. The loans of all the affected families should be rescheduled.
- b. The families whose loans are rescheduled should be eligible for fresh loans.
- c. The interest liability of the borrowers for the extended period of up to two years (both for short and long term loans) should be waived and the financial burden equally shared between the central and state governments.

#### Formalisation of Informal Credit<sup>47</sup>

The Expert Group underlines the need for mitigating the burden of farmers’ indebtedness to moneylenders. It recommends a one-time measure of providing long-term loans by banks to farmers to enable them to repay their debts to the moneylenders.

These short term measures would take care of the immediate needs of the farmers, and they do not require a lot of government resources for implementation. And for the overall benefits of agriculture, the above stated long term measures have to be undertaken.

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<sup>46</sup> Recommendation 12 of R Radhakrishna Committee Report

<sup>47</sup> Recommendation 15 of R Radhakrishna Committee Report