



W.P.(MD)No.12847 of 2021

BEFORE THE MADURAI BENCH OF MADRAS HIGH COURT

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DATED : 11.12.2023

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THE HONOURABLE MR.JUSTICE N.ANAND VENKATESH

Orders Reserved On 06.12.2023	Orders Pronounced On 11.12.2023
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- 1.Ramakrishanan, S/o.Ponnusamy
- 2.Sagadevan, S/o.Ponnusamy
- 3.Arumugam, D/o.Subramaniam, W/o.Arumugam
- 4.Arumugam, S/o.Ponnusamy
- 5.Chellaiah, S/o.Arumugam
- 6.Vishwam, S/o.Sadachsaram
- 7.Selvam, S/o.Ramasamy
- 8.Soosaimanickam, S/o.Rayappan
- 9.Dhanalakshmi, W/o.Markandan
- 10.Revathi, W/o.Govindan
- 11.Danial, S/o.Lasar
- 12.Stellamary, W/o.Danial
- 13.Duraisamy, S/o.Seeni
- 14.Kulanthdhairaj, S/o.Soosai Raj

... Petitioners

Vs.

- 1.The District Collector,
Ramanathapuram District,
Ramanathapuram.



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- 2.The Regional Manager,
Agriculture Insurance Company of India Ltd.,
1st Floor, Andhra Insurance Building,
Old No.156, New No.323,
Thambu Chetty Street,
Paris Corner,
Chennai – 600 001.
- 3.The Tahsildar,
Thiruvadanai Taluk,
Ramanathapuram District.
- 4.The Tahsildar,
R.S.Mangalam Taluk,
Ramanathapuram District.
- 5.The Secretary,
Primary Cooperative Credit Society,
NN.591, Thirutheravalai,
R.S.Mangalam Taluk,
Ramanathapuram District.
- 6.The Secretary,
NN.556 Neivayal Primary Agricultural Cooperative Bank,
Thiruvadanai,
Ramanathapuram District
- 7.The Branch Manager,
The Ramanathapuram District Central
Cooperative Bank Ltd.,
R.S.Mangalam,
Ramanathapuram District.
- 8.The Branch Manager,
State Bank of India, Karaikudi Branch,
Sivagangai District.



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9.The Branch Manager,
State Bank of India,
Devakottai, Sivagangai District.

10.The Branch Manager,
Pandian Grama Bank,
Now Tamil Nadu Grama Bank,
Puliyal, Ramanathapuram District

11.The Tamil Nadu Agricultural University,
The Department of Remote Sensing and GIS,
P.N. Pudur, Coimbatore,
Tamil Nadu - 641 003.

... Respondents

(R11 is *suo motu* impleaded vide court
order dated 22.11.2023)

Prayer:- Writ Petition filed under Article 226 of the Constitution of India,
praying to issue a Writ of Mandamus, directing the respondents to disburse
the amount of Insurance for the failure of crops under the National
Agricultural Crop Insurance Scheme to the petitioners for the year
2018-2019, based on the representation dated 12.02.2021.

For Petitioners 1 to 5, 8 & 10 to 14: Mr.J.Anandkumar

For Petitioners 6, 7 and 9 : Mr.A.Arputharaj

For R1, R3 and R4 : Mr.A.K.Manikkam
Special Government Pleader

For R2 : Mr.D.Srinivasa Raghavan
Standing Counsel

For R5 and R6 : Mr.B.Saravanan
Standing Counsel



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eligible for the insurance claim of Rs.22,500/- per Acre for the year 2018-2019. Since the same was not settled by the Society, the present Writ Petition was filed before this Court.

3. When the matter came up for hearing on 06.11.2023, this Court passed the following order:-

"The learned Standing Counsel appearing on behalf of the second respondent, based on the written instructions, submitted that the claims have been settled insofar as the petitioners 1 to 11 are concerned. Insofar as the petitioners 12 to 14 are concerned, the application details are not available and hence, their claims have not been settled. The learned Standing Counsel further submitted that if the application details of the petitioners 12 to 14 are furnished, the second respondent will settle the claims, as it was done for the petitioners 1 to 11.

2.The learned Counsel for the petitioners submitted that even insofar as the petitioners 1 to 11 are concerned, only 25% was paid as compensation and whereas, as per the Operation Guidelines under Pradhan Mantri Fasal Bima Yojana, the petitioners are entitled for entire 100% compensation.

3.The second respondent is directed to file a counter in this case. In the meantime, the learned Counsel for the petitioners shall furnish the application details of the petitioners 12 to 14, so that



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their claims can also be settled, as was done for the other petitioners.

4.Post this case on 22.11.2023."

4. Thereafter, the matter was posted for hearing on 22.11.2023 and this Court passed the following order:-

"Pursuant to the earlier order passed on 06.11.2023, this matter is posted for hearing today.

2.The second respondent has filed counter affidavit along with all the relevant documents and a copy of the same has also been served on the learned counsel for the petitioners.

3.The learned counsel for the petitioners submitted that the particulars regarding the petitioners 12 to 14 were furnished to the learned counsel for the second respondent. The learned counsel for the second respondent submitted that he will take instructions and ensure that 25% of the compensation that was paid to the other petitioners will be paid to the petitioners 12 to 14 also.

4.The main issue that has been raised by the learned counsel for the petitioners is that the second respondent has fixed the total compensation payable at 25% of the gross total sum insured based on the report of the Tamil Nadu Agricultural University. This report is found at page No.55 of the typed set papers filed by the second respondent. On going through this report, it is seen that the University has identified 102 villages under the category of failed



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sowing. The report has been given based on remote sensing based information. The operational guidelines issued under PMFBY scheme shows that the coverage of risk and exclusions is based on various stages. The same is dealt with under clause 5 of the guidelines. The prevented sowing is the first stage, standing crop, which is the stage from sowing to harvest is the second stage and third stage is post-harvest losses. The loss is assessed based on these stages. Insofar as the first stage viz., failed sowing, the amount payable is 25% of the gross total sum insured.

5.The learned counsel for the petitioners submitted that the Tamil Nadu Agricultural University cannot identify the stage of crop without making spot inspection by merely relying upon the remote sensing based information. He further submitted that 102 villages have been identified at Ramanathapuram District to fall under this category of failed sowing, even without there being any data to show that spot inspection was made to find out the stage of the crop. In the instant case, two blocks are involved at Ramanathapuram District., viz., Kokkrani and Thiruthervalai.

6.In the considered view of this Court, the Insurance Company merely goes by the report given by the Tamil Nadu Agricultural University and they will not be able to explain as to how the stage of the crop was assessed. This explanation can be given only by the Tamil Nadu Agricultural University. It is true that this Court in exercise of its writ jurisdiction cannot go into specialized areas and sit over judgment on the reports given by the



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experts. However, this Court wants to understand as to how the Tamil Nadu Agricultural University through remote sensing based information will be able to assess the stage of the crop for 102 villages even without making a spot inspection. In view of the same, the Tamil Nadu Agricultural University, the Department of Remote Sensing and GIS, P.N.Pudur, Coimbatore, Tamil Nadu 641 003, is suo motu added as 11th respondent in this writ petition.

7.Mr.Thirumurthy, the learned standing counsel takes notice for the 11th respondent. The learned standing counsel shall take written instructions from the newly impleaded 11th respondent as to how the report is prepared to assess the stage of the crop as per the operational guidelines under PMFBY.

8.Post this case on 06.12.2023 under the same caption."

5. Heard the learned counsel appearing for the parties.

6. There is no dispute with regard to the fact that the petitioners had sustained loss due to failure of crops and the second respondent was prepared to pay 25% as the compensation amount to all the petitioners, since according to the second respondent, it was assessed that there was only a failed sowing and therefore, the amount payable is 25% of the gross total sum insured.



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7. The learned counsel for the petitioners submitted that the petitioners are entitled for the entire 100% compensation. The learned counsel also questioned the manner in which the respondents had assessed that there was only failed sowing, without even conducting a physical inspection.

8. This Court wanted to understand as to how the Tamil Nadu Agricultural University through remote sensing based information was able to assess the stage of the crop for nearly 102 Villages even without making a spot inspection. Therefore, this Court directed the impleaded 11th respondent to file a report.

9. The impleaded 11th respondent has filed the report. Dr.Ragunath, who belongs to the Department of Remote Sensing and GIS, Tamil Nadu Agricultural University, was also present before this Court to explain as to how they were able to assess the stage of the crop through remote sensing. For proper appreciation, the report submitted on methodology and the information derived for three Villages to come to a conclusion that there was failed sowing, is extracted hereunder:-



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"Tamil Nadu Agricultural University (TNAU) has established Department of Tamil Remote Sensing and GIS during 2010 to cater the needs of different stakeholders in the state of Tamil Nadu in providing spatial information on soil, crop, water and impact of agricultural disasters. The Government of Tamil Nadu has permitted Tamil Nadu Agricultural University to provide Remote Sensing based information and crop signatures to be utilized under PMFBY crop insurance scheme in Tamil Nadu.

TNAU utilizes Sentinel 1A synthetic Aperture Radar satellite data from European Space Agency (ESA) for generating crop information to suit different features of PMFBY viz., prevented sowing, failed sowing, mid-season adversaries and end of season yield loss assessment. TNAU was requested to generate the crop signature to identify the villages for invoking prevented / failed sowing during 2018-19 in Ramanathapuram district by the insurance company. PMFBY manual defines that failed sowing is the phenomena where the crop didn't germinate or fails at early establishment stages (within 30 days from establishment).

TNAU has downloaded Sentinel 1A SAR satellite data between 16th August 2018 and 09th January 2019 and generated crop signatures using backscattering values at 12 days interval. The intensity of backscattering measured in dB depends on the crop biomass, plant height, soil characteristics, leaf area and water content. The backscattering values differ from crop to crop and also for the same crop in different ecosystem. A detailed analysis of



temporal signatures of rice from VH polarization was done for deriving parameters viz., mean value of Built-up area, minimum value at tillering, minimum and maximum crop cycle duration, maximum value at the start of season, start of the season to last acquisition, minimum primary and secondary variation, maximum value and days of temporary water.

The backscatter signature of a normal rice crop will have a minimum dB value at agronomic flooding / sowing and increases through the crop growth stages (vegetative and tillering) and reach a peak at heading stage (flowering) and declines thereafter. In case of crop failure at early stages (failed sowing), the temporal signature drops immediately whenever the crop dries due to moisture stress.

Based on this criteria, the villages where the signature drops (crop fails) during 1st to 3rd satellite pass were identified for invoking failed sowing feature of PMFBY scheme. If the crop fails afterwards then it is identified as total crop failure and the claims are made based on the yield loss.

On analysing the temporal crop signatures in the three villages viz., Kokurani, Thiruthervalai and Neyvayal of Ramanathapuram district, it was found that the crops signature drops between 2nd and 3rd pass from germination and did not increase thereafter, indicating failure of crop at establishment stage, hence recommended for invoking failed sowing in these villages."



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10. Dr.Ragunath explained that the Agricultural University utilizes Sentinel 1A Synthetic Aperture Radar Satellite Data for generating crop information to find out the various stages like, prevented sowing, failed sowing, mid-season adversaries and end of season yield loss assessment. The data was downloaded between 16th August, 2018 and 9th January, 2019. Dr.Ragunath also pointed out to the various satellite images that were captured during this period and explained as to how the satellite data is used for identifying the crop failure. Accordingly, in whichever Village, the crop signature drops during 1st to 3rd satellite pass were identified for invoking failed sowing. For the three Villages, which are involved in this Writ Petition, it was found that the crop signature dropped between 2nd and 3rd pass from germination and did not increase thereafter.

11. This Court is convinced with the report submitted by the 11th respondent and the explanation given by the Specialist. There is a definite mechanism to assess the various stages of crop failure. Even as per the Operational Guidelines, the loss assessment procedure provided in Clause 21.2.4.4 enables the assessment of loss from information/services of satellite data. In view of the same, it is not necessary that it is only the joint



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Committee, which has to decide the eligibility after assessing the loss.

When an effective scientific data is available to accurately assess the loss of crop during its various stages, it is not necessary to once again manually do the same exercise through a Committee. It will only result in duplication of the same work.

12. In the light of the above discussion, this Court does not find any illegality in the decision that was arrived at by the second respondent to pay compensation to the petitioners at the rate of 25% on the ground that the loss was occasioned due to failed sowing. The second respondent shall ensure that all the petitioners are paid 25% of the gross total sum insured, if they are entitled for the same and if not already paid and this process shall be completed within a period of four weeks from the date of receipt of a copy of this order.

13. This Writ Petition is disposed of in the above terms. No costs.

Index : Yes
NCC : Yes
Speaking order
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N.ANAND VENKATESH, J.

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Pre-delivery order made in

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