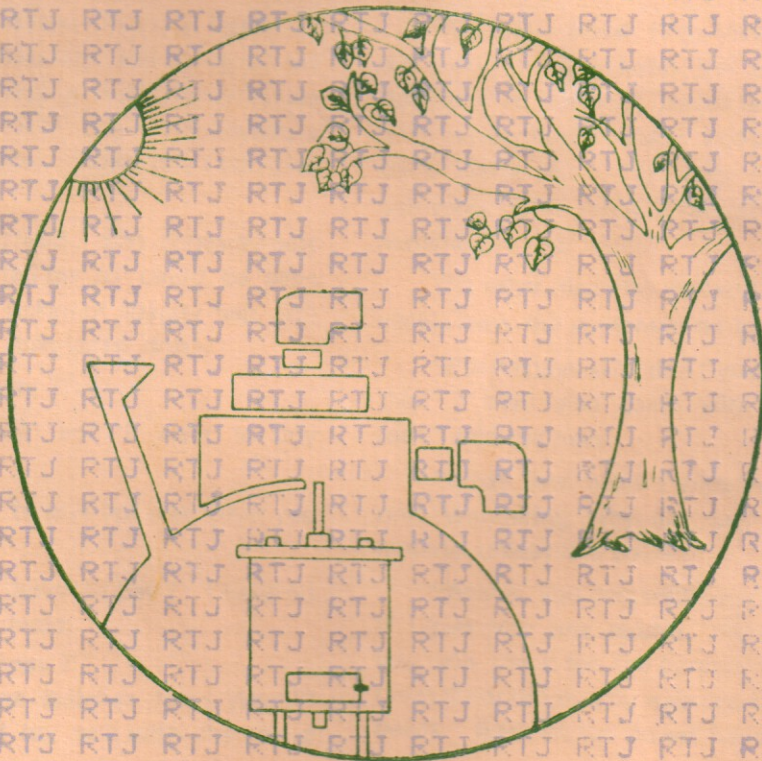


# RURAL TECHNOLOGY

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## No Match To Treated Thatch

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*Chemically treated thatches can be used effectively for low cost roofing. This thatch has four times longer life than untreated thatches. Treating method, material requirement and cost analysis have been described in the present paper.*

Vijayanagari is a small village-almost a hamlet-in Kanyakumari District. A young man was going on the dusty road through the village and into every house and coming out. On return from one of the houses, a lady accosted him, Young man : "why don't you give me some money ?".

He looked at her, surprised. She appeared past her prime; chill penury adopted her as could be seen from her wrinkled brows, unkempt shaggy hair, dull eyes, worn-out features and dust-laden dress.

"Why do you want money ?"

"My hut needs roofing and I want to buy thatches."

"Oh ! I have no money to give but can give you thatches", said he.

"How much should I have to pay ? I have no money you know", she countered.

"Whoever asked you money ?"

"What, you are giving me thatches free ! Why ?"

Another man who heard her talk with the young man came and stood by and was wondering why this sudden affection of a young man for an old lady.

"Amma, I come from Vivekananda Kendra. We are trying to popularise the advantage of chemical treatment of coconut leaves to prolong their lives. I have been going to many houses here and talking to them about it. On the way, you met me luckily. If you come with me, I shall give you enough plaited material for your needs".

The other man also showed some interest as was visible from the eagerness on his face.

"Ponnamma, why don't you go and find out about this. I shall also come with you, if you have any fear," said the man.

"What fear have I with this young man ? I am only wondering why any one wants to part with material unless it is useless."

"Amma, you come with me and see for yourself. If I give you any money, there is no guarantee that you will use it for the purpose you asked it. In your present condition, you may use it for your more urgent needs. Besides, we do not handle cash."

With little encouragement, the lady came to Vivekananda Kendra along with these two persons.

"There, Amma, see the thatches stacked in rows in the room. Tell me, how many you want ?"

She entered the room, sniffed and closed her nostrils with the end of her saree as if in disgust, and

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said; "Ah ! Now I know why you want to dispose off your rotten matril. I was wondering why a man wants to give away anything free. You want to get rid of unwanted stuff. Is it ? But why do you choose an old woman for such purpose, young man ?"

"Amma, you are mistaking me. These are chemically treated thatches. They do smell now and once they are on the top of your hut and exposed to free air for a couple of months, they will be free of the smell. Let me explain," he said. She was not convinced but the other man appeared interested.

"All right, you tell us", he encouraged the young man.

Patiently the social worker explained: "See, the thatches without any treatment last about a year or two at the maximum. But if they are treated in the way, I point out now, they will last for 4 to 5 years and also protect the roof better from insects etc.

"The chemical treatment is a simple process and can be easily adopted by all. The material required are copper sulphate, kerosene and cashew shell liquid and plain water. The plain pale brown leaves first cut into halves and immersed in water for a day or two and then plaited. The plaited sheets are then dipped in copper sulphate solution for five minutes."

"Why ?", asked the man, interested. "We are using copper sulphate sometimes when we need large quantity of paste so as to extend its storage life. I also know that copper sulphate mixed with quick lime and water is used for agricultural purposes, though I do not know why."

"Ha, you are now telling the correct thing. I shall come to that. Copper sulphate has got fungicidal properties and can control fungus growth or mould or even some plant diseases. Would you like to hear about it ?"

"Ah, tell me, if you have time."

"A man had a grape garden close to the road and he found a number of people were coming and stealing bunches of grapes whenever they passed that way. He could not keep watch all the time. The vines also appeared to have been affected by some diseases. He

was afraid of the loss of his crop. In a fit of anger, he thought, he gave a quote of copper sulphate on the berries to leave a light blue colour, people would stop stealing them for fear of being poisoned and he could also save his crop. But he did not realise that he became a pioneer in the use of copper sulphate as a fungicide. When he smeared copper sulphate solution prepared in a drum containing some lime, on the grape vines, the disease noticed by him also disappeared and the berries remained untouched by way-farers for fear of being poisoned. This happened long back in France and later on, scientists developed the use of copper sulphate for agricultural purpose."

"Yes, yes. I also remember now, if used with lime for white washing it reduced the mould on the walls due to dampness," said the man. He was now more interested and requested to proceed.

"Yes, After dipping the thatches in the copper sulphate solution, they are stacked one above the other and shade-dried. Even the coir strings used for tying the thatches on to the roof are dipped for anti-fungal purpose. Later on, these plaited thatches are given a thin coating of cashew shell liquid, mixed with kerosene. This acts as a weather proof agent on the thatches. These are again dried and aired properly before use."

"But what about the smell ?"

"As I said earlier, it will go in a couple of months."

"Will not kerosene and cashew shell liquid add to the combustible quality of the thatches ?"

"Not more than that is already there. We are trying to provide some fire-proof treatment also and it is still in the experimental stage and not available with us for large scale application."

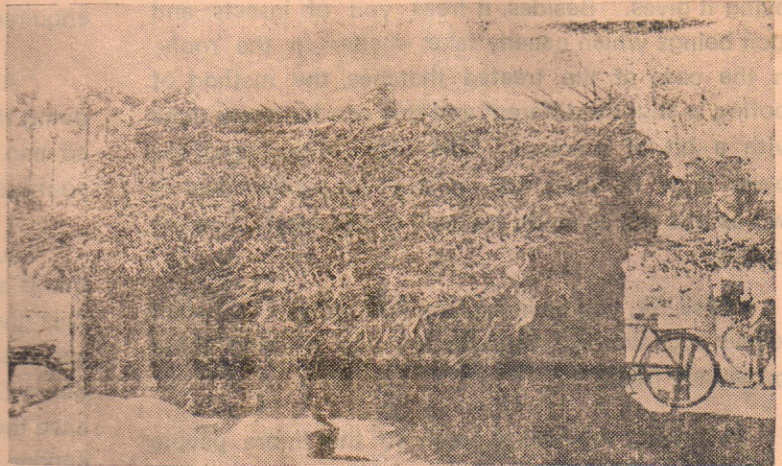
"Seems interesting, but what about the cost, Sir", said the lady, who was so far a silent spectator only. In her case, every thing seemed to be moving round rupees and paise.

"In the old method the cost came to about Rs. 5.30 while in the case of treated thatches it comes

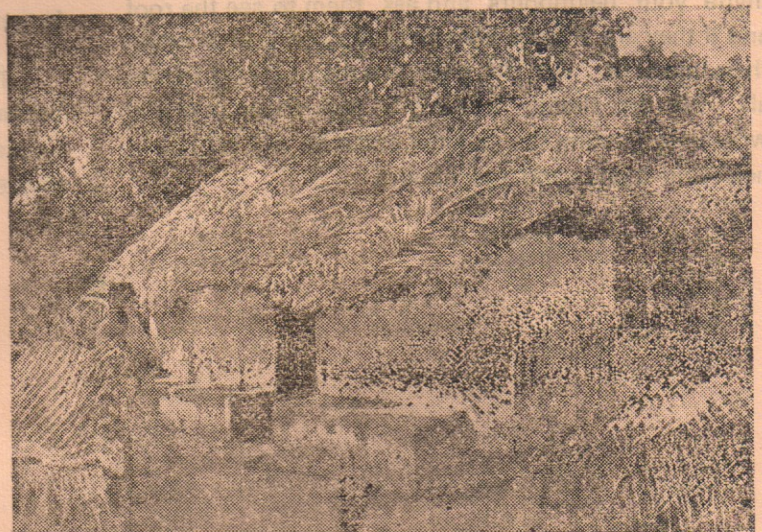




Leaves of a vertically split coconut palm frond being pleated into a thatch before treatment.



A hut in Kanyakumari, with sides and roof made up of treated coconut leaf thatches supplied by Kendra.



A Kutch house with treated thatches as roofing material, which lasts longer than untreated thatches.



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to about Rs. 8.15 per sq.meter and the life span is four times that of untreated thatches. The initial cost is a little more, I agree but is off-set by its long-range saving it gives. Besides, it frees you of insects and such beings which usually take shelter in the roofs. In the case of the treated thatches, the method of roofing is slightly different and this can be easily done with a bit of practice. This helps in reusing of the lower layer of thatching material for another year or two as it is not as much exposed to the element as the top layer."

"Well Sir, you have explained all these. We shall believe your words. But why are you offering these to the lady free?"

"We want the idea to catch so that more people come forward."

"That is well-said", chuckled the old lady who has already started calculating how much she wanted. She looked at the young man, "When shall I have the thatches?"

"Right now, take ten bundles and use them. Invite your neighbours and ask them to see the roof and if they are willing, we shall help them in treating their material. We do not give the material free to all. We are already training a few young men and women in treating the material and they will come and help your friends and neighbours."

Saying thanks, she asked the man who accompanied her to help in transporting the bundles of thatches to her place. Just before leaving, both of them enquired with a reluctance :

"All right, Sir, you are kind. But why are you doing this kind of work? You seem to be an educated man. Are you not getting a good job befitting your knowledge?"

Laughing, the young man replied, "No Amma, this is a fine job. In fact a better job than I can get. This gives me an opportunity to know people like you and besides Swami Vivekananda said : "Serve Man, Serve God" and by serving the deserving people we have the satisfaction of serving the God himself. Our Kendra itself is on this job and we are its instruments.

"Very nice, young man, meeting you and knowing about your organisation we shall come again and hear more about your work. Please consider us as your own."

"Yes, Amma, You are always ours. Thank you for your love" said the satisfied young man.

This is more or less a true-to-life story that happened in Vijayanagari village when one of our life-workers went there for the purpose described above.



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