

## **ERRAs Construction Policy: Queries and Explanations**

Deaths caused by an Earthquake can be reduced through better quality building construction. After the horrific destruction of the October 8<sup>th</sup> EQ the Government of Pakistan created a department known as ERRA, which has proposed basic construction techniques in order to make the construction in the affected areas EQ resistant and much safer than before. According to the ERRA strategy the homeowner will be responsible for the new construction of their house. Only after following ERRA's guidelines will the homeowner receive Government financial assistance. Following these guidelines is in the best interest of the people. To make houses EQ resistant, ERRA, in collaboration with UN Habitat, SDC and GTZ, has opened up 12 Housing Reconstruction Centers in AJK and NWFP, whose main focus is to provide training and technical assistance to the ERRA Partner Organizations (POs) which will directly implement the reconstruction policy, as well as providing assistance and information directly to the people reconstructing their homes. Partner Organization mobile teams should go to each village and provide people with technical assistance. POs are responsible for training masons and other people who are related to construction.

### **QUESTIONS**

#### **Question 1:**

**Within how many days after an assessment should a person receive the money and whom should a person contact if their payment is late?**

#### **Answer:**

If a house is completely surveyed and an MoU is signed then the payment should be in your account within 15 days. In the case that the grant is not transferred into your account within 15 days, then you can visit the offices of the Assistant Commissioner or Deputy Commissioner in AJK and the offices of the DDRO and DCO in NWFP for information.

#### **Question 2:**

**Can we start construction as soon as we get the payment?**

#### **Answer:**

Yes, people can start construction at any time after getting payment but one thing should be kept in mind: they should get training about construction of houses from a Housing Reconstruction Center or the Partner Organization working in the particular area before starting construction, because construction of houses should be according to ERRA guidelines. If their construction is according to ERRA guidelines only then will they get the next installment.

**Question 3:**

**If a person is not satisfied with the survey which authority or person should they consult in order to solve the problem?**

**Answer:**

There are two ways to solve it: First, if the survey was conducted by an Army or Government Inspection team and the homeowner is not satisfied with the results, then they can contact their Village Reconstruction Committee (VRC). If for some reason this Village Reconstruction Committee has not been established in their village, then in AJK they can contact the Assistant Commissioner (AC) and in NWFP they can contact the DDRO. In AJK, if they are not satisfied by the AC then they can go to the DC at District level and in NWFP if they are not satisfied with the DDRO then they can go to the DCO.

**Question 4:**

**Will the grant which ERRA is giving to people be the same for all affected areas or will it vary with the level of destruction?**

**Answer:**

This amount of grant will be the same for everyone and every area. There will be no difference with location.

**Question 5:**

**If a person does not have a NADRA ID card or it is lost then what sort of documents must he have to receive the payments?**

**Answer:**

If someone does not possess an ID card, then he can show another legal identity element such as his domicile or any document which shows his identity. In case he does not have any such documents then he needs well-known and honorable men of his community who will testify that he is that particular person. Once this is done then he can receive payments.

**Question 6:**

**Why is the entire amount not given at one time, instead of in installments?**

**Answer:**

The government does not want that a similar disaster to the massive Earthquake occur again due to low construction quality. So the government has proposed a policy that all houses should be earthquake resistant. To ensure this, they are going to supervise houses at every stage to ensure that people are building houses according to Earthquake resistant techniques. They will also check that people are building houses according to ERRA guidelines and whether they are using their grants to construct their house, or somewhere else. That is why payments are made in installments.

**Question 7:**

**Can unmarried people also be eligible for financial aid?**

**Answer:**

Yes

**Question 8:**

**It is said that the government has received aid of approximately 6 billion dollars, yet people will get only Rs. 175,000. The joint family system is common here, so can people accommodate their large family with this small amount?**

**Answer:**

One thing that needs to be made clear is that the amount which is given to people is aid not compensation. People should clearly know that aid which is given is not the exact amount of their destroyed house. This is financial assistance that the Government is providing through its own resources. Another thing is that there were high expectations that a lot of countries and people who had promised aid would provide aid immediately but the government of Pakistan has not received all the aid yet. It was estimated that 1.3 billion dollars will be spent for reconstruction, but we have so far received only 400 million dollars, and most of it was given to the government as a loan. So, the Government is giving the grant to people using its own resources and this grant is fixed by the Government resources which are available.

**Question 9:**

**There are lots of places in Azad Kashmir which are at high altitudes and many of the people in such areas have rebuilt their houses. Are these people eligible for the grant from ERRA?**

**Answer:**

If they have built their houses according to ERRA policy of earthquake resistant houses, then they will get the payment. If it is not an earthquake resistant house then they have to add ERRA earthquake resistant techniques to the house to receive payment.

**Question 10:**

**Is there any organization which trains people and provides information about reconstruction?**

**Answer:**

ERRA has established 12 Housing Reconstruction Centers (HRC) in the earthquake affected areas: six in NWFP and six in Azad Kashmir for the training of people. The six centers of AJK are in Bagh, Dhirkot, Rawalakot, Muzaffarabad, Pattika

and Hattian. The six centers of NWFP are in Pattan, Maira, Banna, Battagram, Battal, and Balakot. These HRCs are training both artisans and the general public in coordination with Partner Organizations. POs are primarily responsible for trainings in the union councils.

**Question 11:**

**Is there any restriction that the construction work must be done by trained people?**

**Answer:**

ERRA does not impose any such restriction but the construction should be according to the techniques approved by ERRA. All the construction which is not in compliance with ERRA techniques will not receive payments and the construction would not be Earthquake resistant.

**Question 12:**

**Will there be any technical person to inspect the houses under construction for further payments?**

**Answer:**

Yes, in order to ensure that all the ongoing constructions are according to earthquake resistant techniques as approved by ERRA the Inspection teams should include a technical person. After the payment received upon the signing of the MOU, the next installment will be given upon completion of plinth level. AI teams will check whether the construction follows technical guidelines. Only after the approval of this inspection will the next payment be made. After the walls have been completed and approved by AI teams the final payment will be issued.

**Question 13:**

**What is the significance of the “yellow map” which has been distributed in most of the communities? Are people bound to follow that map in every aspect?**

**Answer:**

The plan known as the “yellow map” is no longer valid. People should not use that because it has been cancelled. To replace this “yellow map” an approved poster (reconstruction checklist) has been issued and distributed. If someone has not received the poster then they can contact the nearest PO field office or HRC to obtain the poster. Construction should be done according to this poster. One thing that needs to be made clear is that mud and dry stone masonry are not considered compliant for financial assistance according to the new policy. The people who use those methods will not be paid, while those people who use cement mortar will be eligible for the next installment.

**Question 14:****Is there any specific design for construction?****Answer:**

What needs to be kept in mind for the construction of homes are ERRAs approved construction techniques. There are not hard and fast rules that people are restricted to build a standard size only. People are free to make rooms of any size according to their needs. The main thing is to follow the techniques recommended by ERRA. The procedure given in the poster is the most basic requirement. If someone wants to make more rooms or big rooms to suit his family needs they must comply with ERRA guidelines and they should also consider that payments are made in installments after completion of plinth and lintel levels. People should consider working within their budgets so that they avoid the chance of stopping construction due to budget constraints and avoid any possibility of delaying payments. The proposed designs of the houses can be seen in the posters.

A simple house is the safest house. A square house is good, but a round shape house is even better. We should avoid building L, T, C and U shape houses because houses of these shapes are more adversely affected during an earthquake.

**Question 15:****Is there any model house for people to follow, because in the field people have demanded that ERRA should provide a model house, so that they could follow the model to construct their home?****Answer:**

ERRA has not prepared any model houses so far. But in this regard if you have any questions about model houses, you can contact your nearest Housing Reconstruction Centre where Earthquake resistant techniques have been displayed. Some organizations have made model houses or houses related to training, but before considering such examples people should consult an HRC.

**Question 16:****What Partner Organizations are working in which areas and why?****Answer:**

The POs that ERRA has selected for the Union Council are in those areas that they were already working in directly following the Earthquake. In every Union Council there is a PO. More than one Union Council can be covered by a PO.

**Question 17:**

**What is the future of those union councils in which no partner organization is working?**

**Answer:**

The areas where POs are not working will be allocated to the Army and it will act as a partner organization in that region.

**Question 18:**

**Is there any check on partner organizations as to whether they are doing their work fairly or not?**

**Answer:**

ERRA Housing Coordinators are to monitor the work of POs, to check whether they are doing their work fairly or not. It is also the responsibility of ERRA to follow up whether EQ resistant techniques have been applied by the people or not. If people want to confirm that the policies disseminated by Partner Organizations have been approved by ERRA or not they can consult their respective HRC. HRC staff will provide assistance to ERRA in this regard.

**Question 19:**

**Will partner organizations provide only technical assistance or will they distribute building materials as well?**

Partner organizations will only provide technical assistance and will not provide any building materials

**Question 20:**

**If a person does not have a safe place to build his house, what should he do?**

**Answer:**

Any land issues are to be taken to the Assistant Commissioners office in AJK and the DDROs office in NWFP. Upon not receiving a satisfactory solution the person can consult the DC/DCO office for provision of safe land to build their houses.

**Question 21:**

**What is the policy of ERRA about the mud and stone masonry?**

**Answer:**

According to the ERRA policy houses that are built with mud and stone will not receive payments. However if cement mortar with stone is used then it's alright and the construction is entitled for next installment.

**Question 22:**

**Can an earthquake resistant house be built using this small amount?**

**Answer:**

A 'core house' can be built with this amount. ERRA encourages homeowners to take advantage of the financial assistance to build at least a small core house with the money. Such core houses could then be enlarged by the homeowner according to their needs and resources.

**Question 23:**

**All people will start construction at the same time and there will be a shortage of construction material in the market. Are there any price control and quality control policies and plans of ERRA?**

**Answer:**

ERRA has approved guidelines about this and is determining places where material at low costs will be available and most of the places have been marked. After marking more places we will give information of these places to people through HRCs and other sources.

**Question 24:**

**Can we use timber in the construction of our houses?**

**Answer:**

According to new ERRA guidelines, people can use timber for roof, doors, windows and for reinforcement in walls. The timber that is used should be dry and treated with oil so that it doesn't deteriorate.

**Question 25:**

**If a person constructs his house according to ERRA guidelines using these minimum standards, will it withstand an earthquake?**

**Answer:**

Houses that are constructed using the techniques proposed by ERRA are more likely to survive an earthquake than houses that don't follow the guidelines. Tests have shown that earthquake resistant houses withstand significantly greater shocks than those built without these techniques.

**Question 26:**

**Why do houses collapse in an earthquake?**

**Answer:**

When an earthquake occurs, the earth and everything attached to it shakes. This shaking is particularly concentrated at joints in the houses – where walls meet, where walls and roof meet, etc. Poor construction practices result in weak joints, which then often break in an earthquake. Often buildings collapse in an earthquake not because of the materials used but because the construction is not proper, particularly the joints.

**Question 27:**

**Most engineers say that houses lose their strength by the use of doors and windows and therefore collapsed in the earthquake. Is that true?**

**Answer:**

Yes, it is true. Due to doors and windows, the strength of a house is lessened. If we make large windows and doors then the walls will be increasingly weakened.

**Question 28:**

**What is the appropriate place for doors and windows in the wall?**

**Answer:**

The corners of walls are weakened if we keep doors and windows near them. So, we should keep doors and windows 2 feet away from the corners.

Secondly, the distance between doors and windows should be at more than 2 feet.

Thirdly, big doors and windows weaken the walls' strength. If the house is a single storey then doors and windows should not cover more than a 50% area of walls. If the house is a double storey then doors and windows should not cover more than a 42% area of the walls. When the construction is done following these rules then the house becomes able to absorb bigger shocks.

**Question 29:**

**To strengthen stone houses you are recommending stitches and bands. Will you tell us how to do that?**

**Answer:**

When we build walls of a house the intent is to make them strong. In order to do so, we can use a stitch on the joint of two walls so that these are joined strongly. We can use bands in the foundation, plinth, above and below the window and below the roof, and tie the roof with a band.



**Question 30:**

**What are vertical bars and how can we use them?**

**Answer:**

Vertical bars prevent the wall from vertical movement. They tie the foundation to the roof and also tie the whole house together. We should use vertical bars at the joint between two walls and on both sides of windows and doors. These vertical bars cover the house from the foundation to the roof.

**Question 31:**

**What kinds of roofs are earthquake resistant and are safe?**

**Answer:**

A heavier roof causes more damage during an earthquake. A lighter roof is more effective and safer. If a house is heavy, it receives more damage during an earthquake. So normally CGI sheet roofs with slopes on 4 sides are better.

**Question 32:**

**With reference to quality control what type of material must we use?**

**Answer:**

Our quality of construction is very low. Even after spending a lot of money we do not get the desired results and the reason for that is improper usage of the material. It has been noted that the masons use cement mortar even 5 to 6 hours after it was prepared. Whereas, according to construction laws, materials lose their strength up to 30% if they aren't used within 2 ½ hours and up to 50% if they are used after 5 to 6 hours. Therefore, whenever cement mortar is prepared it should be made sure that cement and sand is 1 to 4 in ratio, it is very important to keep in mind that the sand is clear of dirt and that it is used within 2 ½ hours of its preparation. Another aspect that needs to be taken care of is that bricks/blocks should be properly watered after you have fixed them. In some cases bricks/blocks are used dry which is why they are less powerful and yet they incur the same expense but we do not get the desired results. In the same regard, whenever cement is used to maximize strength it must also be watered. When watering usually gets done here it gets sprayed from above by using a pipe and mug but this is not the proper procedure. The correct procedure is to place a sandbag on a wall and wet it thoroughly. Watering must be done for at least 10 days. So, it is not the type of materials used which is most important, but the construction techniques used to build with the materials.