



**'Together we can make earthquake resistant buildings safer and cheaper, for millions of people in the developing world'**

**How to earthquake-proof a simple traditional house? What is the best foundation for a rubble stone building? How to make a safe roof on this school made of earth? What reinforcements do we need in those hospital walls...? It is 2017 and we still don't know much about these important basics, which are vital to build safer; and cheaper as well.**

Expensive and in-depth scientific research is seldom undertaken for so-called 'non-engineered' techniques, and therefore the existing information is often confusing, contradicting and incomplete. Meanwhile millions of people live in traditional houses and go to school in dangerous buildings.

Natural disasters like earthquakes occur frequently and the impact and destruction increases every year. Simply said: Due to lack of reliable knowledge and tested data, structures are not safe, the building quality is poor, money is wasted and people are being put at risk every day. SMARTnet is going to change all that!

### **Groundbreaking project**

SMARTnet is our latest groundbreaking project that goes back to the basics. We research what is needed to make simple and safe earthquake resistant buildings, and we develop practical solutions which can make a big difference for prevention, or after disasters. But we cannot do this alone and your contribution, big or small, can make a huge difference in how fast we can find these solutions!

### **Who we are**

SMARTnet is the most challenging project so far of the Dutch non-profit Smart Shelter Foundation. In the past 10 years, we have built earthquake resistant buildings and did research in Nepal, India and Indonesia. **Our projects have survived the recent 2015 earthquakes in Nepal without any significant damage.** Unfortunately, this was not the case for more than 1.000.000 houses and schools that were damaged or have collapsed. We need to prevent this!

### **Local approach**

How we work? We have started innovative collaborations with universities, experts and earthquake institutes worldwide, to tackle all basic issues. We will test and validate existing knowledge, we will optimize existing techniques, and we will complement missing data. Our approach is unique as we take the local situation as a starting-point and we develop new methodologies which include site-specific variables, such as local ground conditions, local material properties, and the influence of local workmanship on the building quality. **Such approach and methodology does not exist anywhere in the world today!**

### **Knowledge transfer**

With this new data and approach, and aided by sophisticated computer programs, we can better calculate and test the techniques. All scientific and technical data will be translated to practical and directly applicable solutions. We create simple examples and videos, to make the information understandable and useful for everyone: from the architects and aid organizations, to the local masons and carpenters. All validated knowledge is published on the online SMARTnet platform, free of cost, and we make sure that it will reach those areas where it is needed the most. All this will lead to a huge improvement of the quality, and it saves time, money and material.

**More knowledge means safer construction!**

### **Your help**

With your support we can find these answers quickly, and together we can provide safe and affordable housing for millions of people worldwide! SMARTnet needs 15.000 Euro for the period 2017- 2018. With this amount, we can develop the online platform, and we can research, test, improve and optimize the building technique with mountain stones, as still mainly used in Nepal.

If you want to support sustainable and long-term solutions with a high impact, please donate via:  
**IBAN: NL 80 ABNA 04 36 02 54 69    swift: ABNANL2A    attn. Smart Shelter Foundation**

For more information or questions, and to see our research assignments and progress, you can visit our website. Thank you in advance and we wish you a great time at the Torino - Nice rally!

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