

The Norwegian natural catastrophe compensation system in the past and the future

Norway has suffered numerous and severe natural disasters throughout its history. Landslides and floods have produced the most relevant losses.

The Norwegian natural catastrophe compensation system not only covers losses from natural catastrophes, but also supports research and studies to prevent and reduce risks in the near future, such as climate change.

The Norwegian compensation system is well-established and uncontroversial. In recent times it undergoes a process of change to meet the challenges of the future and, at the same time, speed up and make more effective the administrative procedures.

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Photograph 1. Malselv's floods – Norway (July 2012)

1. Foreword

Norway is a country exposed to a demanding climate, and its inhabitants have traditionally been aware of this fact and adjusted to the dangers. In fact, there are a quite a few Norwegians with last names that translated mean “landslide” and “flood”. As society evolved, so did an attitude among politicians that people should not be let unassisted when catastrophe struck. A governmental supported compensation system was established, and it has developed and changed over the years.

Norway has changed along with the rest of the world. The structure of towns and villages, level of welfare, sources of income and politic priorities have changed. Today, we also face climate change, both as a demanding fact to adapt to, and as a reminder that we should be aware of our impact on the environment and that we are inhabitants on a common planet.

As natural catastrophe compensation administrators, we strive to build, run and develop our programmes so that we can provide good and reliable risk reduction products to the public in the future, even under changing conditions. National and international cooperation is an effective and rewarding way of reaching our goals. Raising public awareness of owners’ responsibilities and their ability to reduce risks is also a priority. In June 2014 the Norwegian Parliament passed a new natural catastrophe compensation law. This gives us an important tool to reach our goals.

2. Norway on the edge of the world

Norway is situated on the western coast of the Scandinavian Peninsula. The country is long and narrow along the North Atlantic Ocean, with a total of 20 000 km coast line. Norway has been affected by many ice ages, and when the ice disappeared 11 – 9 000 years ago, it left a terrain of large mountainous areas, long fjords, steep valleys, and a lot of debris of rocks, sand and clay behind.

The ice ages have to a great extent determined the shape of the landscape, and are also important explanation factors to our natural hazards. The weight of the glaciers was extreme, and the land is still rising from the sea after this weight was removed. This will to some degree counter effect the global rise of sea level as a consequence of climate change.

The Norwegian climate is temperate due to the effect of the Gulf Stream along the coast, and is affected by the Polar Front that creates western winds. Inlands the climate is traditionally cold in the winter, and the northern parts of the country are dominated by more arctic conditions.

The first two weeks of January this year offered the variation the Norwegian winter can have: Minus 42 degrees Celsius in northern inland settlements, plus 12 degrees Celsius in the far south, over 2 metres of heavy, wet snow on the roofs on the south west coast, many closed

roads due to strong winds and snow, and icy, slippery roads with a lot of incidents for both pedestrians and traffic in the south east.

Norway is relatively scarcely populated, with about 5.1 mill inhabitants on a total area of 385 000 square kilometres. Norway is blessed with natural resources such as oil, gas, minerals, seafood, forest, fresh water, and suitable conditions for hydro power production. These resources are still important as input to Norwegian industries and employment. In today's market, 100 Norwegian kroner equals approximately 11 Euro.

3. Largest known natural catastrophes

Natural disasters have always been a part of the Norwegian history. On the fjord beds of central western Norway, lies massive deposits, evidence of enormous landslides and rock falls thousands of years ago, that must have caused gigantic destruction.

1345

Norway's oldest known, and possibly worst, natural catastrophe took place in the valley of Gauldalen, when as many as 500 people may have lost their lives in the enormous quick clay landslide which destroyed 50 farms.

1789

The worst known flooding catastrophe occurred when severe rainfall over a long period of time triggered numerous landslides and an extreme flood in the river Glomma, which affected all the connected watercourses in South-eastern Norway. The catastrophe claimed 72 human lives and more than 1500 farms were damaged.

1893

The quick clay landslide in the municipality of Verdal is the largest disaster of its kind in modern-day Norway, killing 116 people. Three square kilometers of land disappeared along with 105 farms.

1905 Loen, 1934 Tafjord, 1936 Loen

Three large rock falls fell directly into lakes and fjords led to enormous and destructive giant waves, tsunamis. A total of 175 people lost their lives when the tsunamis caused by the rock falls hit land and whole villages were left deserted.

1978

A quick clay landslide in the municipality of Rissa, killed one person and 20 houses and farms were destroyed. This was by far the most serious quick clay landslide in Norway in modern times. The accident led to increased focus on monitoring of quick clay areas in Norway.



Fotografía 2. Control de deslizamientos en los fiordos



Photograph 3. Flam's floods—Norway (October 2014)

1992

“The New Year hurricane” January 1st, in major parts of the Norwegian coast-line, is the strongest storm ever measured in mainland Norway. Only one life was lost, but a total of 50 000 – 60 000 buildings were damaged or totally destroyed.

1995

In the massive flood in the Eastern parts of Norway in 1995, one person was killed and 7 000 persons were evacuated from their homes. The damages after the deluge amounted to more than 1.8 billion NOK.

2011

This became the worst damage year since 1992. In June flooding in the east Norway rivers Lågen and Glomma and their side rivers made damages to homes, roads, industry, sports and agriculture. In August, flood in the river Gaula in central Norway made a lot of damage. In November and December extreme storms accompanied with heavy rain made heavy damage to most coastal regions in the country.

2013

In May 2013 another flooding in the east Norway rivers Lågen and Glomma and their side rivers made damages to homes, roads, industry, sports and agriculture. Many citizens experienced losses for the second time in two years. Again extreme storms struck in November and December and destroyed a lot of property along the west coast of the country.

4. Increasing demands for a compensation program

Up until the Verdal landslide in 1893, there was only small scale governmental aid for the victims of natural disasters. The government apparatus was relatively unevolved and the government economy very limited. When a debate started on the introduction of a Compensation Scheme, mainly Insurance Schemes with little or no government financial assistance were considered.

From 1929, temporary regulations came into force giving aid in natural disasters. This help was strongly means-tested and based on the victims, the Municipalities and the government all contributing equally “by going Dutch”. From the end of the 1800s, the government granted loans, mostly interest-free, which were sometimes pardoned very quickly.

In 1918 a Committee was appointed to consider the possible set-up of a governmental or compulsory private insurance scheme. A Government Paper from 1917 states:

“... to grant government subsidies to the victims of individual accidents can lead to serious consequences, but in later years, however, the government has in certain exceptional cases given aid, and the question of an governmental insurance scheme for these damages has been

raised several times in the past 20 years.” Furthermore, “.. we must admit that there is something lacking in a society if those who suffer damages in these types of accidents cannot be insured against loss”.

The Resolution stated that there was no basis for establishing either a governmental or a collective private insurance system for natural damages.

The Natural Disaster Fund was established in 1929 with the help of surplus means from a nation-wide collection for landslide victims. The intention was to replace the temporary regulations for government grants with strict means-testing and three-part financing. Later, most of the resources came as national budget grants. After the 2nd World War, the debate continued on the need for a more permanent, legislative compensation regime for natural disasters.

In 1957, a Committee was appointed with the intention of investigating insurance and compensation schemes in times of natural disasters. Their report in 1959 suggested a Law, which differed considerably from the existing system on three important points:

- The Government’s Natural Disaster Fund is legislatively established and the Parliament allocates an annual sum to the Fund.
- Compensation is legally-binding according to objective regulations.
- Means-testing no longer applies.

Regarding the terms, the Committee states:

“It is in complete agreement with the current views in our legal system that the authorities should contribute with aid to victims of such accidents, and that the help should not be in the nature of contingency savings”. Furthermore,
“If one is to arrive at a rational regime for compensation which is effective and consistent in its treatment of disaster cases then, in the opinion of the Committee, it is necessary, as far as possible to stipulate the claims objectively”.

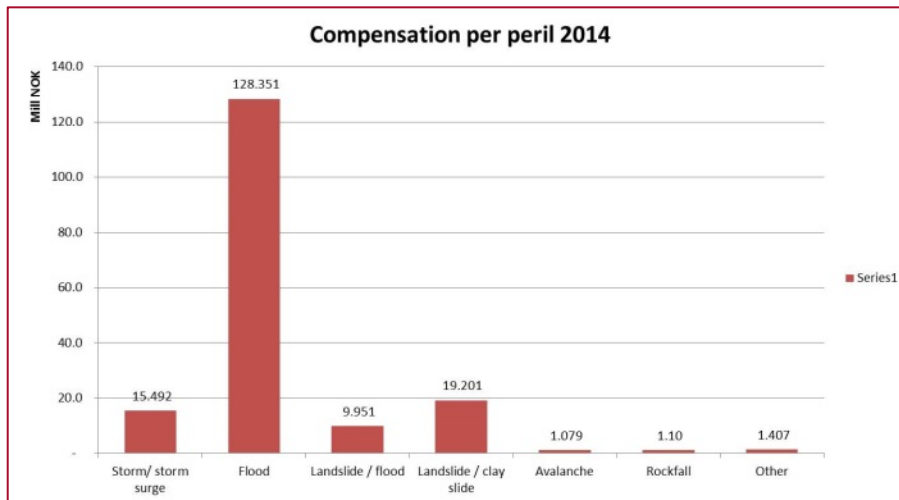
Two clear clauses were suggested to control expenses:

- Damages must be due to accidents of nature and limited to landslide, storms, floods, tsunamis and such like.
- A set maximum reimbursement sum, full compensation only for the first 1/3, and compensation for the remaining sum is based on a percentage scale.

The law was passed in 1961. The core principles of this law are still fundamental in the legislation today.

5. The role of the Natural Disaster Fund: Compensation, safety and contingency planning

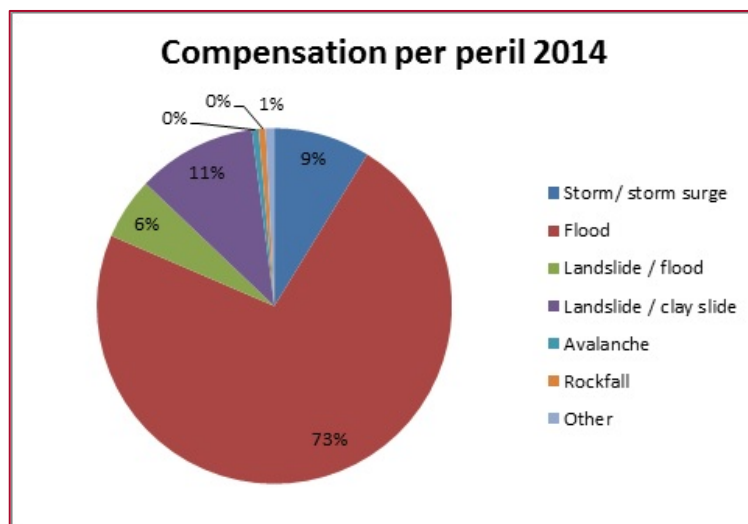
Paragraph 1 of the National Natural Disaster Fund stipulated that compensation was to be made, measures for improving safety had to be taken, and aid could be given to establish security measures after natural disasters.



From the time of the 1961 bill, time has been spent on a daily basis with a varying amount of claims requiring large and small compensation sums, with the majority comprising less serious damages.

A typical claim from the years 2000 to 2010 amounts to around 70 000,- NOK, and 75 % of the claims which have been reimbursed are of average size or below. A few more serious cases which have been reimbursed with more than 500.000 NOK raise the median.

The majorities of serious damages are settled quickly, and are relatively uncomplicated to process through the system. However, in 1 – 2 % of cases, one of the involved parties will not accept the amount arrived at by the rural legal authorities and a dispute arises. Either the victim of the accident or the Natural Disaster Fund can then demand a re-evaluation from the District Court.



Norwegian Agriculture Agency has operated as the Fund’s Secretariat since 2000 and represents the Fund in court disputes. Approximately 20 disputes are handled in an average year. Some of the cases are appealed to higher courts.

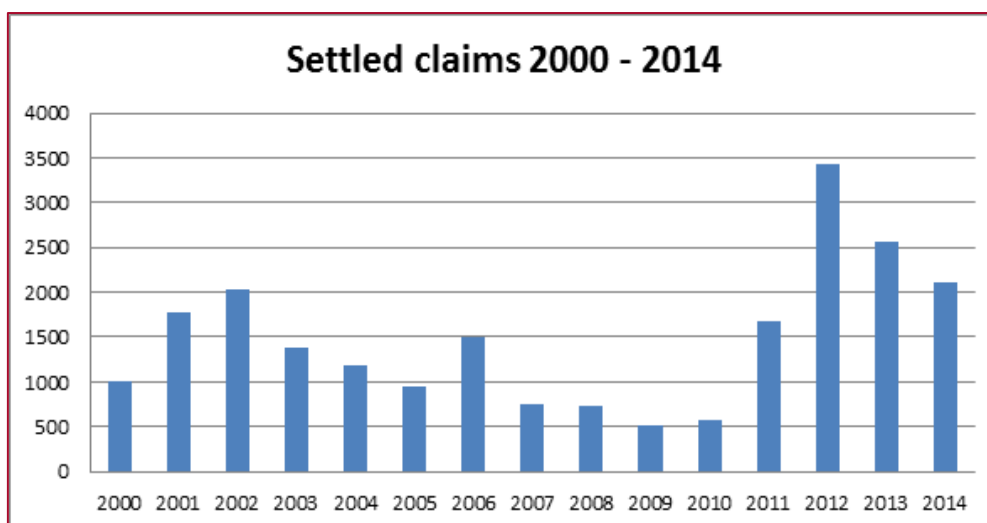
From 1961 to 2009, the Fund granted limited annual sums towards various safety measures. Funds have also been allocated to relevant research projects.

The most predominant form of protective measure used to be assistance to vacate properties exposed to landslides. In later years, the Fund was involved in financing a series of different measures: building landslide walls against avalanches, flood protection installations, grants for surveying quick clay and stone landslide risk areas, avalanche barriers, as well as a monitoring project for mountains showing signs of cracking up, that will, if large parts fall down into the sea, produce highly damaging tsunamis in the narrow surrounding fjords.

The Fund makes Contingency Plans for any major natural disaster, such as the ones we have seen over the 50 year period of the Fund’s history, and which we can expect in the future.

6. Changes in the Natural Disaster Compensation Regime

In 1971 a Committee was appointed to reinvestigate the possibility of an insurance scheme covering natural disasters in Norway. The conclusion this time was that there was a basis for such a regime. Natural Disaster Insurance would be mandatory and incorporated in fire damage insurance for houses and business premises. Changes were made in the Natural Disaster Law and the Law of Insurance Agreements in 1980. The new Natural Disaster Insurance Law was passed in 1989, regulating mandatory cover for natural disasters of buildings insured against fire. The effect was that almost 50 % of the annual damage claims measured in compensation amount, was transferred from the governmental program to insurance. A close cooperation between the two schemes, which still exists today, was established.



Both the Natural Disaster Law and the Natural Disaster Insurance Law have been changed since then.

2005

- Forest damages due to storms were excluded from coverage by the Natural Disaster Law, because it was considered covered by an insurance program.
- Natural disaster damages to house clusters, farmyards, gardens, and private roads leading to homes and business premises was transferred to the Natural Disaster Insurance Law coverage.

2009

- The responsibility for distributing subsidies targeted for municipality security measures stipulated in the Natural Disaster Law was transferred to the Norwegian Water Resources and Energy Directorate.

7. Today's' tasks: Compensation, Research and Development, and Contingency Planning

The procedure for handling claims is practically unchanged since the 1960's. In the average year, approximately 1 300 natural damage claims are settled and while most of these are relatively small, there are also larger cases. Flood damages dominates, but landslides, avalanches, rock fall incidents and storms occur each year and cause damages which are covered under the regime.

Norwegian Agriculture Agency (NAA), acting as the Secretariat of The Norwegian Natural Disaster Fund, is responsible for the day-to-day administration and has the authority necessary to accept or repeal any natural disaster estimates for compensation. NAA prepare claims for board meetings, reimburse claims and represent the Board both in court and in cooperation with other organizations. We also give high priority to information and counselling, to both the public in general and to the disaster victims.

The Regional Legal Office's Judgment

Damages are reported to the Local Legal Authority, and the local Judicial Assessor produces an estimate of the cost of repairing the damage in accordance with regulations, and registering all relevant information which the Board of the Natural Disaster Fund requires to make a fair decision.

The legalities in Higher Assessments

If the land owner or the Board of the Norwegian Natural Disaster Fund does not accept the legal assessor's decision, an appeal can be made to the District Court. They can give a new assessment of the damages, a so-called Higher Assessment. The Court uses qualified surveyors who make field trips to ascertain the damage and there is an oral negotiation in Court.

The Board’s Procedures

The Board meets six times a year to settle claims prepared by the Secretariat. The Secretariat has the legal authority to handle smaller claims. The Board arranges Extraordinary Meetings whenever necessary, and Safety/ Contingency exercises are held.

The Board’s Settlements – complaints

Complaints over the Fund’s settlements are handled by the Appeal Council of the Norwegian Natural Disaster Fund. The Appeal Council is the complaints instance for both the Natural Disaster Law and Natural Damage Insurance Law with special responsibility for complaints on legal matters.

Other Responsibilities

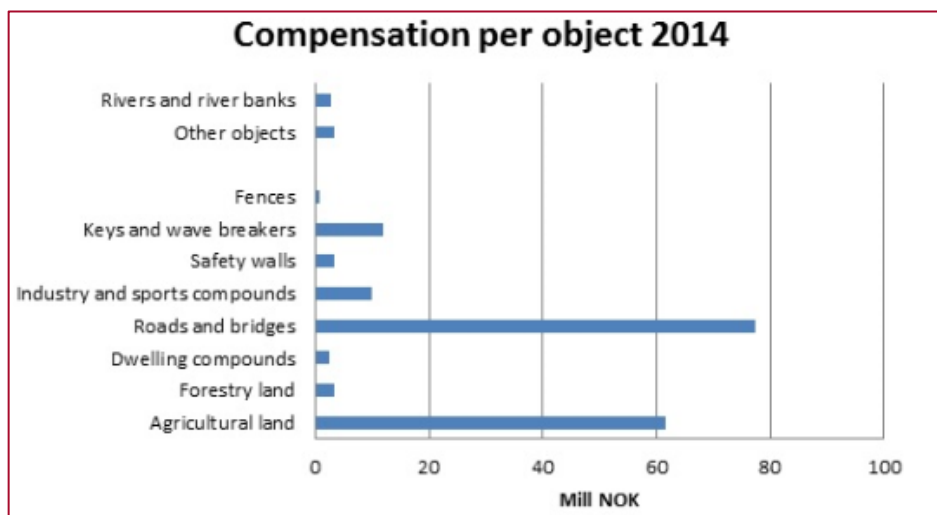
The Fund also contributes financially to research and development in the field of preventing, limiting and handling natural disasters, as well as administrative assistance and cooperation through the various Public Administration offices.

The Fund has intensified its focus on safety functions in crisis situations. The Fund’s apparatus and competence can be mobilized quickly in the case of major accidents that produce many claims.

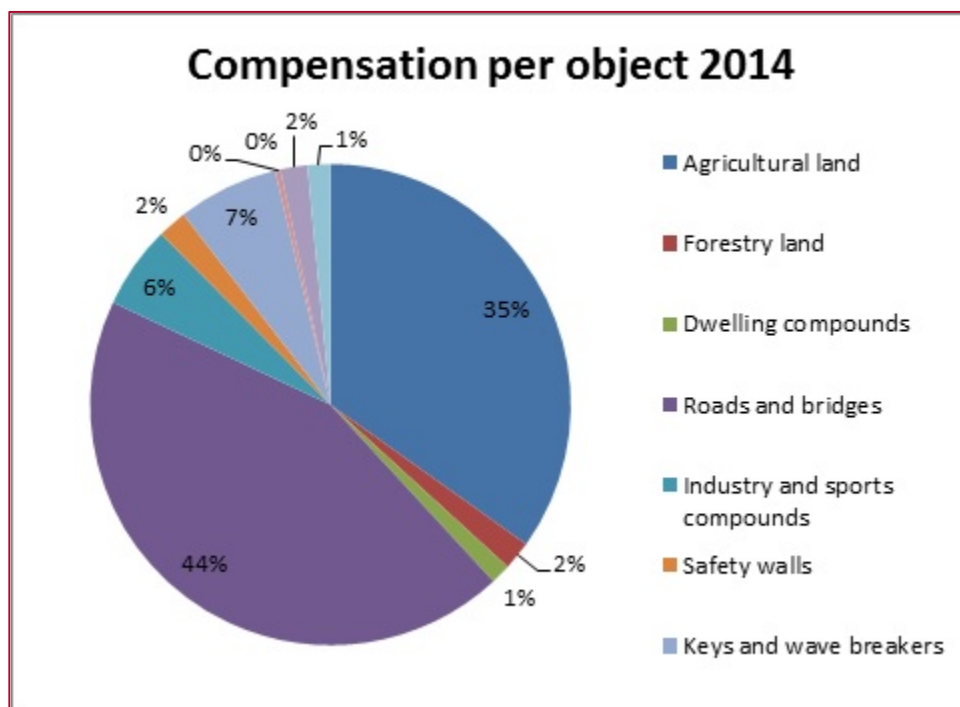
8. New Natural Disaster Compensation Law approved

The Natural Disaster regime in Norway is well-established and uncontroversial. There has been a broad political consensus that Norway should have a comprehensive compensation system in times of natural disasters. The government’s Natural Disaster Fund and the Natural Disaster Insurance cover practically all direct damages to buildings and land. The Regime appears to work well, with relatively few appeals, and there is limited pressure to expand to other areas of compensation.

Still, over the years we have experienced some weaknesses, both in the compensation regulations and in the administrative system around them.

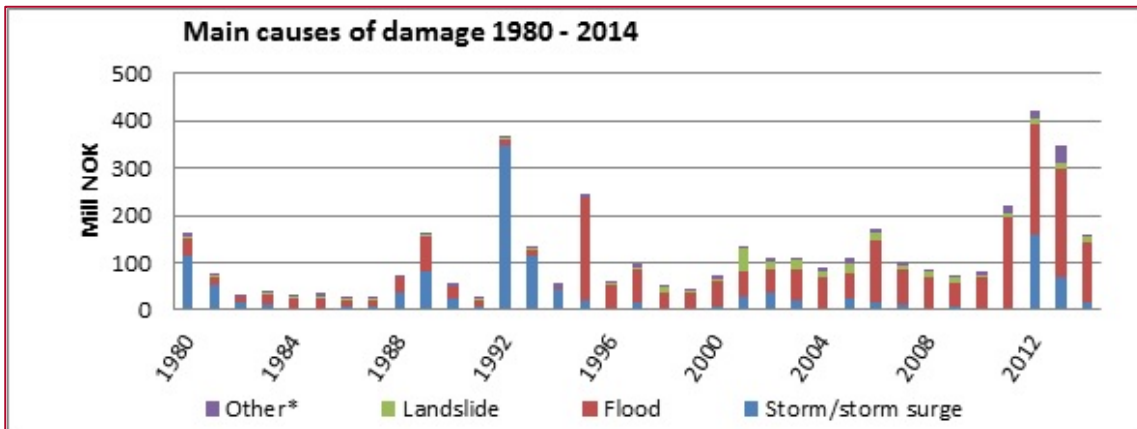


The administrative proceedings do not allow rapid settlement of the claims. Local police is in charge of damage documentation and estimations of repair costs, and must prioritize between this task and other police matters. This leads to challenges with both speed and quality of work. Complaints of the assessment from one of the parties lead to re-assessment by court, and the courts have waiting lists. When the estimations are concluded, the claims are settled by the Board, which meet six times a year. The reimbursement is paid when documentation of repair is received. There is a strong need for new administrative proceedings that can lead to far more rapid settlements. In addition, it is not considered user friendly to the public having to settle complaints over damage assessments in the courts.



The main principles of The Natural Disaster Law are made over 50 years ago. The law and its regulations do not describe clearly the rights and obligations of the customer, since so much, over so many years, is defined and clarified in courts. It is therefore highly desirable to rewrite the regulations in a new and updated law.

In 2004 the Norwegian Agriculture Agency was asked to prepare a new Natural Disaster Law. The report of recommendations was presented to the Ministry early in 2008. The draft for a new Natural Disaster Compensation Law was a proposal to continue developing the regime through modernizing the law and introducing new administrative proceedings that allows faster and better settling of claims. The Report reflects progress in the Public Sector and society as a whole, as greater focus is now given to the “big picture” regarding measures in the case of natural disasters, land use planning, emergency procedures, and compensation and safety measures.



The new Natural Disaster Compensation Law was unanimously approved by Parliament in June 2014, and will be put into force in January 2017. Norwegian Agriculture Agency is now developing new administrative proceedings, IT tools, regulations, guidelines and public information to prepare the introduction of the new law.

9. Challenges and priorities for the future

A new and modern law with full political support is under implementation. Still, there are challenges to deal with. Norwegian society as well as global climate is changing, and our sense of what is efficient and qualitative good public and customer services is evolving, along with public expectations. Below I describe the topics that are on top of our agenda in the years to come.

9.1. Climate change

Climate change is an acknowledged fact. Different parts of the world will experience it differently, both in magnitude and in which changes will be the most challenging.

Due to Norway’s geography and geology, we prepare to cope with a “warmer, wilder and wetter” climate. We expect more frequent and stronger rainfalls, higher temperatures that for instance can lead to winter rain and floods instead of snowfall, and summer draughts in certain areas. Both intense rainfall and floods will increase the risk of landslides. If there will be more frequent extreme storms, Norway is at risk for major damages. Sea level rise will challenge the coastal settlements and installations. Since Norway is still rising from the ocean – recovering from the ice age - we expect substantial problems from sea level rise, but less than many other coastal nations.

A growing problem is – based on experience from flooding incidents the last years – increased sand and gravel transport from valley slopes that deposits in the major river systems. This increases the frequency of and damages from future floods.

Climate change increases the demands on both authorities and citizens. The goal must be to prevent and / or minimize damages when natural disasters occur. As societies we should also increase our ability to recover quickly from natural disasters.

Governmental bodies should make clear and understandable regulations, recommendations and services towards land use planning and vulnerability reduction planning. They subsidize the building of safety measures with high cost/benefit value. Governmental bodies should continue contributing to expand knowledge about efficient climate change adaptation strategies, and make relevant know-how and tools available to municipality policy-makers and stake-holders.

The municipalities have an important role in making their inhabitants safe. It should be an important role for the municipality authorities to facilitate that houses, roads, water, draining systems and other important infrastructure is dimensioned and maintained so that security against natural damages in a climate in transition is maintained and improved.

9.2. Clarifying responsibilities and roles

Another focus area the later years has been responsibility and roles. Different laws and documents define the roles, obligations and rights of different governmental, regional and municipality bodies, private institutions, property owners and citizens. There is a general acknowledgement that there is still work to do in defining and distribute roles and responsibilities between governmental bodies, in order to offer good and efficient services to the public. Both legal clarification and evolving efficient cooperation and sharing of information are given priority.

Clear role and responsibility definition and division between the property owner and the authorities is also prioritized. It is important that the owner knows what he can expect from the authorities and what he must take responsibility for himself. He should also be able to understand what he is entitled to, and from whom, so that he can pursue his rights. Only when this is satisfactory, the owner can make informed choices regarding building activities, insurance, maintenance risk reduction etc.

NAA wishes to contribute in the clarification efforts. Clearer roles and responsibilities will contribute to strengthened cooperation and better public services. Clearer property owner responsibilities can empower him to take responsibility for risk reduction activities, and this is also a necessary foundation for compensation reductions if the obligations are not met.

9.3. National cooperation building knowledge, contingency planning and crisis management

Socio-economic changes have among other things led and will still lead to centralization. More and more people prefer to live in or close to smaller or bigger cities. This leads in turn to a

deficit of safe building areas. We have over the last decade experienced intensive building in areas prone to natural disasters.

The focus on risk mapping, conscious land use planning, building codes, contingency planning and crisis management has increased substantially over the last years. Compensation programs are a small, but important part of society's safety and security system for the public. In order to meet a changing world, and to give the public relevant and qualitative good services and information, it is absolutely necessary for Norwegian Agriculture Agency to cooperate closely with relevant governmental and private entities.

The Norwegian Water Resources and Energy Directorate (NVE) has a mandate to ensure an integrated and environmentally sound management of the country's water resources. The directorate plays a central role in the national flood contingency planning. From 2009 NVE is assigned greater responsibility for the prevention of damage caused by landslides. NVE is involved in research and development in its fields and is the national center of expertise for hydrology in Norway.

Norwegian Directorate for Civil Protection (DSB) responsibilities regarding civil protection covers national, regional and local preparedness and emergency planning, and the directorate seeks to reduce vulnerability in society, strengthen cooperation in the field of preparedness and crisis management, and knowledge based crisis prevention. DSB supports the Ministry of Justice and Public Security in coordinating civil protection and emergency planning efforts in Norway. This includes preparing an annual national risk report, planning and performing drills and exercises, as well as other civil protection measures.

Norwegian Police Directorate (POD)

The police is often the first on site when a crisis is developing or has occurred. POD's Department for police preparedness and crisis management is responsible for cooperation with other governmental and private entities in the areas of safety, preparedness and crisis management. POD focus on development of methods, equipment and communication, cooperation, security and contingency planning.

9.4. International cooperation – sharing of knowledge and experience

Norwegian Agriculture Agency has a strong belief in cooperation and open sharing of knowledge as a foundation of improvement. Though conditions in countries differ in many ways, we also have a lot in common. The experiences in other countries – both successes and less favourable incidents – are important learning points for others.

We are among other things members of World Forum of Catastrophe Programmes, where Consorcio de Compensación de Seguros since the beginning has been an active force. In this informal forum, there is openness between programmes to share and contribute to organisations with similar objectives. We are convinced that this kind of cooperation is both evolving our customer services and is cost efficient.

The cooperation has also led to more direct contact. Consorcio was kind enough to host a visit, meeting and field trip for the Board and the Complaints Committee of the Norwegian Natural Disaster Fund, and the Norwegian Natural Perils Pool in 2014. We are very grateful for the extensive program and presentations that we had. By learning more into depth about the Spanish system, we are now more prepared to develop the necessary tools and mechanisms around our new Natural Disaster Compensation Law that will be put into force in January 2017. We are looking forward to more cooperation in the future.



Photograph 4. Norwegian delegation visits the flood risk mitigation works Órbigo River (Leon, Spain).