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WELCOME TO ARMENIA

DISASTER MANAGEMENT
ACTIVITIES AND ROLE OF THE
NATIONAL SURVEY FOR SEISMIC
PROTECTION UNDER THE
GOVERNMENT OF THE REPUBLIC
OF ARMENIA

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THIS IS ARMENIA



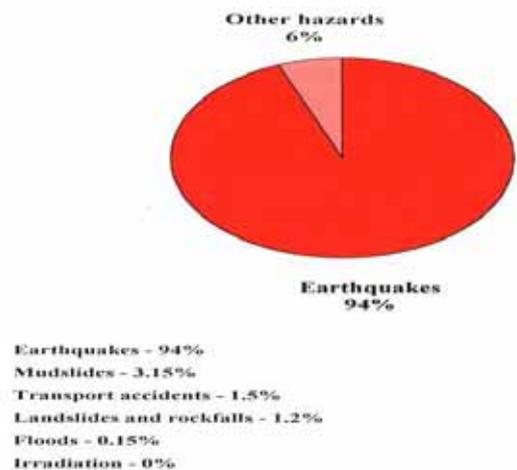
GENERAL IDEA ABOUT ARMENIA

- LOCATED IN SOUTHERWESTER ASIA, EAST OF TURKEY
- SURROUNDED BY NORTH - GEORGIA EAST - AZERBAIJAN SOUTH - IRAN WEST - TURKEY
- CLIMATE HIGHLAND CONTINENTAL HOT SUMMER COLD WINTERS
- LAND AREA TOTAL 29.800 SQ KM LAND 28.400 SQ KM WATER 1.400 SQ KM
- ELEVATION EXTREMES LOWEST POINT - DEBED RIVER 400M HIGHEST POINT - ARAGATS LERR 4.095 M
- POPULATION 3,344,386
- FORMER NAME ARMENIAN SOVIET SOCIALIST REPUBLIC

GENERAL IDEA ABOUT ARMENIA 2

- RELIGIONS
ARMENIAN APOSTOLIC 96%
- LANGUAGES
ARMENIAN 96%
RUSSIAN 2%
OTHER 2%
- EXTENDED FAMILY SYSTEM
- LITERACY RATE
DEFINITION: AGE 15 AND OVER CAN READ AND WRITE
- ARMENIAN CIRCLE DANCES AND TRADITIONAL FOLK MUSIC ARE WORLD FAMOUS
- ARMENIA IS SITUATED IN THE ZONE OF HIGH SEISMIC HAZARD OF ALPINE-HIMALAYAN AND BALKAN-CARPATHIAN SEISMIC BELTS

DISASTERS IN ARMENIA



The loss caused by different types of disasters in Armenia

GOVERNMENT OF THE REPUBLIC OF ARMENIA

- **GOVERNMENT TYPE**
REPUBLIC
- **CAPITAL** YEREVAN
- **ADMINISTRATIVE DIVISIONS**
10 PROVINCES AND 1 CITY
- **LEGAL SYSTEM**
BASED ON CIVIL LAW SYSTEM
- **INDEPENDENCE**
28 MAY 1918
(FIRST ARMENIAN REPUBLIC)
- **23 SEPTEMBER 1991**
(FROM SOVIET UNION)
- **NATIONAL HOLIDAY**
REFERENDUM DAY, 21 SEPTEMBER
- **CONSTITUTION**
ADOPTED BY NATION-WIDE REFERENDUM 5 JULY 1995

BASIC LAWS OF ARMENIA



- **LAW ON REFERENDUM OF THE REPUBLIC OF ARMENIA**
- **LAW ON PUBLIC ORGANIZATIONS**
- **LAW PUBLIC-POLITICAL ORGANIZATIONS**
- **BY-LAWS OF THE NATIONAL ASSEMBLY**
- **LAW ON LOCAL SELF-GOVERNMENT**

ECONOMICAL SITUATION

❖ INDUSTRIES

METAL-CUTTING
MACHINE TOOLS
FORGING-PRESSING
MACHINES
ELECTRIC MOTORS
TIRES
KNITTED WEAR
HOSIERY
SHOES
CHEMICALS
TRUCKS
INSTRUMENTS



ECONOMICAL SITUATION 2

❖ IMPORTS

NATURAL GAS
PETROLEUM
FOODSTUFFS
TOBACCO PRODUCTS

❖ EXPORTS

DIAMONDS
SCRAP METAL
MACHINERY
COGNAC
COOPER ORE
BRANDY
MINERAL WATER
BEER



MAJOR INTERNATIONAL HUMANITARIAN ORGANIZATIONS IN ARMENIA



- **OCHA**
OFFICE FOR THE COORDINATION
OF HUMANITARIAN AFFAIRS



- **USAID**
US AGENCY FOR INTERNATIONAL
DEVELOPMENT



- **UNDP**
UNITED NATIONS DEVELOPMENT
PROGRAMME



- **ARCS**
ARMENIAN RED CROSS SOCIETY

BACK GROUND OF THE ESTABLISHMENT OF NSSP RA

- IN 1988 SPITAK EARTHQUAKE OCCURRED
- 25,000 PEOPLE WERE KILLED
- OVER 20,000 PEOPLE WERE INJURED
- 515,000 PEOPLE WERE RENDERED HOMELESS
- A LARGE NUMBER OF CITIES IN NORTH ARMENIA WERE DESTROYED AND SOCIAL AND ECONOMICAL PATTERN OF THE ENTIRE COUNTRY WERE CHANGED

BEFORE THE 1988 EARTHQUAKE THERE WAS NOT A CLEAR AND WELL PLANNED DISASTER MANAGEMENT SYSTEM FOR THE COUNTRY

THE MAIN REASON FOR THAT WAS, ARMENIA WAS RULED BY THE SOVIET UNION THOSE DAYS

THEY DID NOT PAY THEIR ATTENTION WELL ON DISASTER MANAGEMENT

THEY DID NOT PREPARE A DISASTER MANAGEMENT PLAN EVEN AFTER EARTHQUAKE OCCURRED IN 1926 (1.000 PEOPLE WERE KILLED)

OTHER THING IS USSR ADMINISTRATIVE SYSTEM WAS HIGHLY CENTRALIZED, ALL THE DECISIONS WERE TAKEN BY USSR ACADEMY OF SCIENCE, WHICH WAS SITUATED IN MOSCOW
THE DID NOT REALIZE THE REAL SITUATION IN ARMENIA



- IT IS FORECASTED THAT THE NEXT EARTHQUAKE WILL BE IN CAPITAL CITY OF ARMENIA, WHERE MORE THAN ONE THIRD OF THE TOTAL POPULATION IN THE COUNTRY LIVE IN
- THERE FOR 1991 A SEISMIC RISK REDUCTION PROGRAM WAS SUBMITTED TO THE PARLIAMENT AND THE GOVERNMENT OF ARMENIA

- THE MAIN TWO PROPOSALS OF THE PROGRAM WERE
 - PREPARATION OF A NATIONAL SEISMIC RISK REDUCTION POLICY
 - ESTABLISHMENT OF A RESPONSIBLE INSTITUTION FOR SEISMIC REDUCTION MATTERS UNDER THE GOVERNMENT WITH REQUIRED POWERS AND AUTHORITIES
- AS A RESULT OF THIS NATIONAL SURVEY FOR SEISMIC PROTECTION (NSSP) WAS ESTABLISHED IN 1991

*NATIONAL SURVEY FOR
SEISMIC PROTECTION UNDER THE
GOVERNMENT OF THE REPUBLIC OF ARMENIA*



*THE MISSION OF ARMENIAN
NSSP*

**“SEISMIC RISK REDUCTION
IN ARMENIA”**

STRATEGIES OF NSSP

1. SEISMIC RISK REDUCTION IN ARMENIA

2. SEISMIC RISK REDUCTION IN YEREVAN CITY

The Programs, adopted by the Government of the Republic of Armenia on the 10th and 7th of July in 1999 are designed for 30 years.

FUNCTIONS OF NSSP

- SEISMIC HAZARD ASSESSMENT
- SEISMIC RISK ASSESSMENT
- PREDICTION OF SECONDARY HAZARD
- PREPAREDNESS MEASURES
- TERRITORIES` VULNERABILITY REDUCTION MEASURES
- PUBLIC AWARENESS
- ESTABLISHMENT EARLY WARNING SYSTEM
- ESTABLISHMENT OF THE CENTER FOR EMERGENCY SITUATION MANAGEMENT
- CREATION OF RAPID RESPONSE MEASURES
- ELABORATION OF LAWS AND CODES
- ESTABLISHMENT OF AN INSURANCE SYSTEM

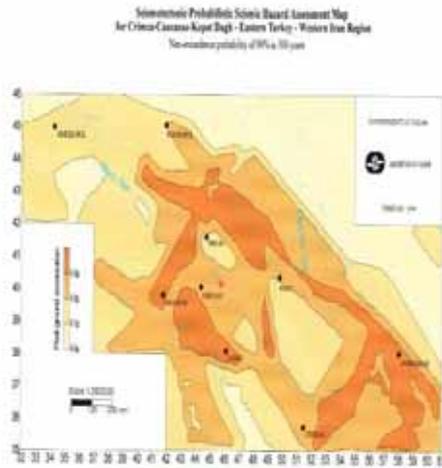
POWERS VASTED TO THE NSSP

- THE NSSP WAS GIVEN SPECIAL GOVERNMENTAL STATUS AND MINISTERIAL POWERS
- THE PRESIDENT OF THE NSSP DIRECTLY RESPONSIBLE TO THE PRIME MINISTER
- IT IS THE UMBRELLA ORGANIZATION FOR SEISMIC REDUCTION MATTERS IN ARMENIA

ACHIEVEMENTS OF THE NSSP

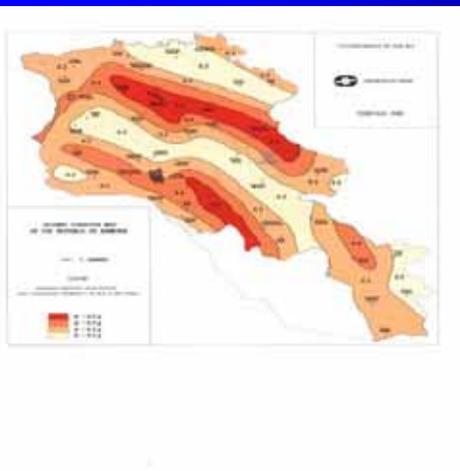
- NSSP WAS AWARDED BY THE “CERTIFICATE OF DISTINCTION ” BY UNITED NATIONS SASAKAWA DISASTER PREVENTION AWARD IN 1998 IN GENEVA FOR ITS DISTINGUISHED CONTRIBUTION TO DISASTER MANAGEMENT FIELD AND SUBSCRIPTION TO IDNDR

SEISMIC HAZARD ASSESSMENT MAP



THE FIRST
PROBABILISTIC MAPS
OF SEISMIC HAZARD
ASSESSMENT HAVE
BEEN CREATED IN
COLLABORATION
WITH SEISMOLOGICAL
ORGANIZATIONS OF
12 COUNTRIES

A NEW SEISMIC ZONATION MAP



- THIS WAS COMPILED IN COLLABORATION WITH SWISS SEISMOLOGICAL SURVEY
- THIS MAP WAS SUBMITTED TO THE GOVERNMENT OF ARMENIA IN 1998 AS A NEW STRATEGIC FOR THE SAFE URBANIZATION

- **NEW SEISMIC CONSTRUCTION CODE HAS BEEN INTRODUCED**
- **LARGE- SCALE INITIATIVES AND PROJECTS WERE DEVELOPED FOR REGIONAL AND INTERNATIONAL COOPERATION**

- **TWO PROJECTS FOR EARLY WARNING SYSTEM AND NOTIFICATION HAVE BEEN DEVELOPED**
 - **EARLY WARNING SYSTEM BASED ON AUTOMATIC REGISTRATION AND DETERMINATION**
 - **EARLY WARNING SYSTEM BASED ON THE FAST DETERMINATION OF EARTHQUAKE PARAMETERS**

- **STATE DISASTER LAW AND REGULATIONS HAS BEEN PREPARED AND SUBMITTED TO THE PARLIAMENT AND GOVERNMENT**
- **PUBLIC EDUCATION AND TRAINING PROGRAMS ARE CONDUCTED**

- **RISK MANAGEMENT, INCLUDING EMERGENCY RESPONSE AND RESCUE OPERATIONS WERE ORGANIZED FOR OPERATION IN STRONG EARTHQUAKE EPICENTRAL ZONE. THEY INCLUDE RESCUERS AND SCIENTIFIC STAFF FOR RESCUE ACTIVITIES AND SCIENTIFIC INVESTIGATIONS IMMEDIATELY AFTER A STRONG EARTHQUAKE**
- **A FULLY EQUIPPED TASK FORCE WAS SENT TO INDIA TO HELP THE VICTIMS OF GUJARAT EARTHQUAKE AND IT WAS HIGHLY ADMIRERD BY INDIAN GOVERNMENT**

- **THREE INTERNATIONAL CONFERENCES WERE ORGANIZED BY NSSP RA**

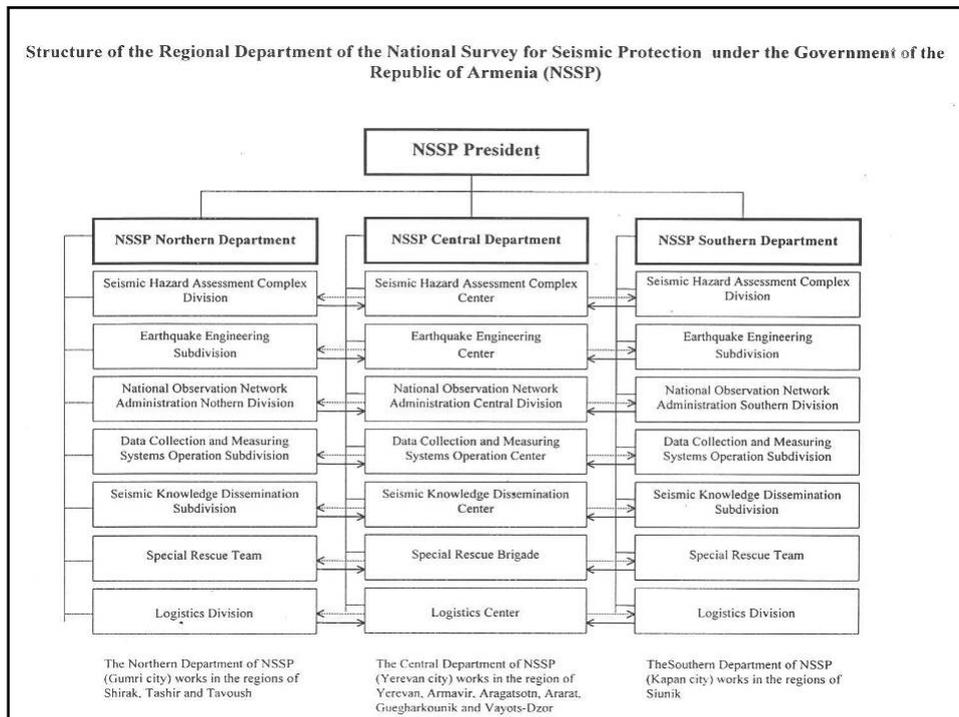
- FIRST INTERNATIONAL CONFERENCE ON “ON CONTINENTAL COLLISION ZONE EARTHQUAKES AND SEISMIC HAZARD REDUCTION” IN 1993 (200 EXPERTS FROM 20 COUNTRIES)
- INTERNATIONAL CONFERENCE ON “HISTORICAL AND PREHISTORICALLY EARTHQUAKE IN THE CAUCASUS” IN 1996
- INTERNATIONAL CONFERENCE ON “EARTHQUAKE HAZARD AND SEISMIC RISK REDUCTION” IN 1998 (300 EXPERTS FROM 43 COUNTRIES)

- **SEVEN INTERNATIONAL PROJECTS ARE IMPLEMENTED BY NSSP**

- INTAS (INTERNATIONAL TEST AREA FOR SHA IN THE CAUCASUS) AND GSHAP (GLOBAL SHA PROGRAM) WITH ITALY AND RUSSIA
- COPERNICUS, WITH GREECE, UK, RUSSIA AND ALBANIA
- PICS (PROGRAM INTERNATIONAL COOPERATION ON SCIENTIFIC) WITH FRANCE
- SMACH-1 WITH SWITZERLAND
- GPS (GLOBAL POSITIONAL SATELLITE GEODESIC SYSTEM) WITH BULGARIA, GERMANY, GREECE, EGYPT, RUSSIA, TURKEY, USA AND SWITZERLAND
- NATO SCIENCE FOR PEACE PROGRAMMED WITH AZERBAIJAN, GEORGIA AND RUSSIA

A FOUNDATION FOR SEISMIC PROTECTION OF ARMENIA WAS ESTABLISHED UNDER THE SUPERVISION OF NSSP





**NSSP CONSISTS OF 1000 STAFF
OUT OF WHICH ARE 300
SCIENTISTS, 300 ENGINEERS
AND TECHNICIANS, AS WELL AS
100 RESCUERS**

CONCLUSION

AFTER THE ESTABLISHMENT OF THE NSSP,
DISASTER MANAGEMENT SYSTEMS OF
ARMENIA WAS RAPIDLY CHANGED AND
IMPROVED.

IT SHOWS THAT ESTABLISHING AN
UMBRELLA ORGANIZATION LIKE NSSP
WITH MORE AUTHORITIES AND POWERS,
IS AN ESSENTIAL REQUIREMENT FOR THE
DEVELOPMENT OF DISASTER MANAGEMENT
ACTIVITIES IN EVERY COUNTRY

