Workshop Objective and Outline

Science in Service of Society

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Service Delivery

Workshop Objective

This week is all about Service Delivery and becoming excellent at it

HOW?

- Sharing experiences
- Learning from each other
- Develop / improve your skills in Service Delivery with the help of the instructors

Workshop Outline

Major emphasis is related to delivery of PWS to Public and Key Partners:

- Building partnerships and developing collaboration for better delivery of services
- Warning Services: Meteoalarm
- Coordination with two Main Partners: Disaster Management and Media
- Media and Communication Skills

What are forecasters good at?

Understanding of the atmosphere

How?

- By being trained in:
  - Science of meteorology
  - Observations (instruments, standards, technology,…)
  - Forecast models and related technology, including IT
  - Operational aspects of forecast production

Changing the Paradigm

We need to learn more about our users

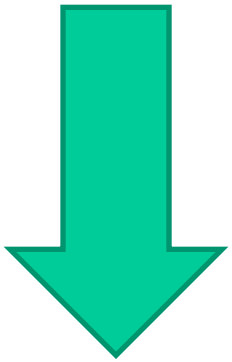
Understanding of the atmosphere

Understanding of our users' needs

Changing the Paradigm

Changing the Paradigm

How do we determine those needs?



Communication!

Communication

- Two way
- Speaking and Listening

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How ?

By developing skills in the following:

- Oral Communication:
  - (dialogue, understanding problems, points of view and needs, feedback),
- Written Communication
- Public speaking
- Presentation skills
- Public education campaigns
- Relationship and partnership building (e.g., media, DRM)

Challenges for PWS Communication

- Forecasting component easier for staff:
  - Familiar environment of forecast office
  - Education and Training in Forecasting
- PWS component more difficult:
  - Requires knowledge and skills not taught
  - Engagement with users: environment often not familiar or even hostile
  - Requires understanding others' points of view and demands: often unfamiliar
  - Feedback: Not always friendly

- That is why to help the PWS Forecasters a great deal of attention is given to communication, dissemination, and relationship building in this workshop

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Dissemination & Communication

Dissemination and Communication Key Components of WS

- Effective dissemination
  - Need to cover as large an audience as possible:
  - Backups and redundancies
  - Must reach Hazards Community

- Communication: multiple channels
  - Traditional (TV, Radio, Sirens, Public Address systems, Coloured Balls and Beacons, Flags)
  - mobile and Social networking (SMS, Web, facebook, twitter)
  - Networking (Ethnic and religious leaders in remote communities)

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A Warning System

Successful Warning Service

A warning service is successful when recipients:

- Receive the warning;
- Understand the information presented;
- Believe the information;
- Personalize the information;
- Make correct decisions; and,
- Respond in an adequate manner,
- Feedback, lessons learnt.

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A Warning System

- Goal WS: maximizing actions for safety
- Requires coordination across many agencies
- Components of a warning system:

1. **Detection, monitoring and Warning (meteorology)**
   - Global, regional, national and local observations of critical environmental parameters
   - Numerical weather prediction
   - Forecasts on different timescales (nowcasting to several days)
2. **Timely issuing and dissemination of authoritative warning information (meteorology)**
3. **Communication: complete only after information received and understood**

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A Warning System

4. **Risk Analysis and impact assessment**
   - Who and what is at risk and why? What will the impacts be?
5. **Mitigation and response: Actions of recipients depend on:**
   - Content and clarity of the warning
   - Credibility of issuing organization
   - State of preparedness of receiving authorities (supported by NMHSs warnings)
6. **Scientific knowledge alone not sufficient**
   - NMHSs + Hazards Community (other government organizations + local officials + emergency managers + media + voluntary and Humanitarian organizations + weather sensitive businesses….)

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Why Warnings Fail?

- Warning become ineffective because of technical factors:

  - Forecast accuracy: miscalculating onset time, intensity or impacts
  - Lack of timeliness of warnings and updates
  - Insufficient data
  - "sole official authority" issue in preparing and issuing warnings-advocated strongly by PWS/WMO
  - Contradictory information from different sources
  - Communication and/or dissemination inadequacies

Why Warnings Fail?

- Warnings become ineffective because of human factors:
  - Ineffective, haphazard and ad-hoc coordination with disaster management and the media
  - Lack of understanding of public's response: making own assessment
  - Warning language and content
    - ✓Complicated, vague, ambiguous, insufficient advice and call to action
  - NMHSs staff inadequacy
  - Lack of a disaster preparedness plan: SOP
  - Low credibility of NMHS

The Last Word in Service Delivery

- The end result of a forecast is to deliver services to:
  - Save lives
  - Protect properties and livelihoods
  - Help people make better decisions with the help of science and technology

Serving the different communities of users!

A prepared society is one that will be best able to protect itself from hazards

Thank you

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