Challenges in communicating science and engaging public in Russia: Large country – different expectations

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Ocean ecosystem services

Picture credit to Peoples and Oceans: managing marine areas for human well-being. Published by Science-to-Action

The oceans provide food, security through protein from wild-caught fisheries and aquaculture, recreational opportunities through fishing, diving, and swimming, and shoreline protection from storms and flooding. Marine resources, particularly seagrasses and mangroves, sequester carbon. The oceans also provide for biodiversity and other services, such as fossil fuels and transportation.
What is communication?

*Communication* is the activity of conveying information through the exchange of thoughts, messages or information as by speech, visuals, signals, written, or behavior.

The communication process is complete once the receiver understands the sender’s message.

*Effective communication* serves the purpose for which it was planned or designed.
Effective communication

SPEAKER: science

MESSAGE: scientific product

ADRESSEE: community

GEOGRAPHICAL ASPECT
EXPECTATIONS/NEEDS
HISTORICAL EXPERIENCE
BACKGROUND KNOWLEDGE

PROPER FEEDBACK
Challenges in communicating science

- remote territories
- numerous small ethnic communities
- differences in background knowledge, historical experience, educational level
- communicative barriers + lack of communicative tools (lack of the Internet users)

Misunderstanding
The Russian Far East

 Territory – 6170 thousand square km, that is 36% of all Russian territory.

 Population – 6.3 million people.

 Density of population – less than 1 person per square km.

 About 20 small ethnic communities with peculiar historical experience, traditions and languages.
North Sea of Okhotsk coastal area

- 14 settlements
- Total population – about 8000 people
- 10% of population are engaged in fisheries
- 20% of water bioresources catches in the Khabarovsk Krai (territory) are produced in this area.

Herring catches

Herring is one of the most valuable commercial fish species. Herring fishing strongly depends on ice conditions in the coastal area of the Sea of Okhotsk.
Herring catch in the northern Sea of Okhotsk

Total catch

Catch of spawning herring
Ratio of spawning herring landed in coastal waters and estuary parts of the rivers

- Catches in estuary parts of the rivers
- Catches produced in coastal waters
Water bioresources as a basic component of human well-being

Conservation of water bioresources

Scientific institutes
- Annual monitoring of water bioresources status, distribution, abundance, reproduction
- Elaboration of the measures on rational use and conservation

Broad user community

TAC assessment
TAC assessment

Water bioresources status, abundance

- Biotic factors (food base)
- Abiotic factors (water $t^\circ$, water level, weather conditions)
- Anthropogenic factors (overfishing, pollutions, spawning grounds destruction)

Broad user community
Public hearings on the materials to determine TAC are organized. Representatives of fisheries associations, legislation bodies and public participate in Public hearings.

Annually scientific fisheries research institutes conducts sessions to present main results of their work. These session are open for authorities and largest fisheries associations.
Communicating science and engaging public

- Fishery forecasts
- Joint researches on commercial vessels
- Tagging programs
- Scientific papers, periodicals
Communicating science and engaging public

- Press releases on official websites
- Cooperation with social funds
- Participation in student conferences
- University students fieldwork
- Education programs
- Cooperation with mass media
We shouldn’t expect an effect of our joint efforts immediately, as ecological and socio-economic changes take time. We invest in our FUTURE.

Thank you for attention!