

## The Role of Radio Programs in Creating Awareness of Climate Change among Farmers in Paktia Province

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### ABSTRACT

Climate change is one of the most severe threats to humanity in the twenty-first century, and mass communication channels, mainly radio, play a vital role in creating awareness of climate change among farmers in the rural areas of third-world countries. This study aimed to examine the role of radio in creating awareness of climate change among farmers in the Paktia Province of Afghanistan. Data was collected through in-depth interviews with ten farmers from three districts: Ahmad Abad, Siad Karam, and Chamkani. Results revealed that (50%) of farmers have limited knowledge of climate change, while (20%) are unaware of it. Furthermore, most of the respondents (50%) noted personal observations (30%) radio, while (20%) accepted that they received information from agricultural cooperatives. Out of the five selected radio stations, only two- Paktia National and Paktia Ghag-broadcasted information about climate change. In addition, most respondents accepted that lack of water, high temperatures, unseasonal rains, unseasonal cold, and heavy storms are the reasons for climate change affecting their yields.

**Keywords:** Climate change, mass media, public awareness, Paktia province, radio programs

### INTRODUCTION

Until recently, radio was the only widely broadcast medium among Afghan residents and second in the emergence of mass media in Afghanistan's media landscape (Shinwari, 2019). The four decades of civil war destroyed every aspect of human life, including the media system, infrastructure, and education system, all over the 34 provinces of the country. Among them, the people of Pakita province also face poor socioeconomic conditions (Mohammadi, 2021). They have a low literacy rate of 11-15% and need access to proper electricity, they prioritize radio programs. Radio can inform, educate, and entertain a large number of listeners, including well-educated, semi-educated, and non-educated listeners (Nwagbara, 2018).

In addition, listening to radio programs is convenient and accessible everywhere at any time, for instance, at home, in the field, on the street, in the office, etc. Moreover, it is also cheaper than other mass media tools. The Broadcasting Board of Governors report illustrates that rural residents are heavier users of radio, with 59.6% tuning in every week, compared with 46.5% in urban areas in Afghanistan (Governors, 2014). Hence, the regular transmission of radio programs on agriculture issues helps formers form valuable information about new farming methods. So, as the researcher mentioned before, the people of Paktia province have poor socioeconomic status. With the lack of production industries and other infrastructure factories, the residents turn to agriculture and obtain their daily needs from their field crops (Mohammadi, 2021). Therefore, when the

former receive helpful information from the radio, they gradually follow and change farming methods by applying new technology (Khanal, 2011).

In addition to this, information and knowledge are two essential elements for rural development. Broadcasting information, new concepts, and agriculture skills can bring farmers novel opportunities to the farmers (Hasbullah, 2010). Nowadays, in developing countries, radio is the dominant and effective mass media tool to disseminate information and knowledge related to agriculture (Nakabugu, 2001). Besides these, the climate is also a significant factor of agriculture, which is currently a global phenomenon among the countries. The climate is changing rapidly, affecting agriculture depending on the region (Nwagbara, 2018). According to a BBC report in the Pashto language, the humanitarian dialogue for the United Nations organization 'Ocha' says that Afghanistan is in the fourth place of the queue at the center of change due to the climate crisis (Durani, 2023). That is why, the residents of Afghanistan, particularly; farmers in Paktia province are crucially suffering from the poor condition of economic. They do not have access to sufficient nutrition, housing, or healthcare facilities, and most of them live in poverty.

Paktia province is experiencing the effects of climate change as a result of annual climate changes and recurrent natural disasters (Mohammadi, 2021). Both natural Earth processes and human activity can be blamed for these climate fluctuations (Nakabugu, 2001). As a result, Paktia province's farmers must deal with the effects of a steadily shifting climate, all the while radio stations continue to transmit every day. Because of this, the province of Paktia has been designated as one where farmers are negatively impacted by climate change (Mohammadi, 2021). Thus, in order to close the current knowledge gap, the researcher conducted this study to find out how radio programs affect farmers in the province of Paktia in terms of their awareness of climate change.

### **Objectives**

1. To examine the farmers of Paktia province have information about climate change.
2. To explore the Paktia Province-based radio station broadcast about creating awareness of climate change.
3. To find out the sources of climate change information available to farmers in Paktia Province.
4. To describe how climate change has affected farmers' crops in Paktia Province.

### **Research Questions**

The core purpose of this study is to find out the role radio stations in Paktia province play in creating awareness of climate change among farmers. Below are the research questions raised for the study:

1. To what extent are the farmers in Paktia province aware of climate change?
2. How involved are Paktia Prvince-based radio stations in creating awareness of climate change?
3. What are the sources of climate change information available to farmers in Paktia Province?
4. How has climate change affected the crops of farmers in Paktia province?

### **Research Methodology**

According to Janice Morse (200), if there is a need to collect huge data by interviewing much time with respondents you can interview 6 to 10 people (Morse, 200). Besides this, the researcher also considered such sample size with the data saturation technique. In this study, ten farmers were selected for In-depth oral interviews using a snowball sample size in the province of Paktia. Such interviews were done in Pashto and

subsequently translated into English due to the participants' inadequate literacy level. There are fourteen districts in Paktia Province but for this study, only the three most harvested districts: Chamkani, Ahmad Abad, and Siad Karam were selected. In addition to this, due to having a larger audience, five radio stations—Paktia Nation Radio, Paktia Ghag, Zwandoon Radio, Owkhton Radio, and Hawa Radio—were selected to look at how the province of Paktia is spreading knowledge of climate change.

## Results

After collecting and analyzing data, the study found results for the first question which is shown in Table 1.

Table 1: To what extent are the farmers in Paktia province aware of climate?

Have More Information	Have Information	Natural	Have Less Information	Have No Information
0	3	0	5	2
0%	30%	0%	50%	20%

When the farmers were asked about information on climate change, the result was that most of them (50%) had less information, and (30%) had information, which means they did need more. In comparison (20%) of farmers answered that they do not have any information about climate change. Unfortunately, not all the farmers answered that they had more or enough information about climate change.

Table 2: How involved are Paktia Province-based radio stations in creating awareness of climate change?

Paktia National Radio	Owkhton Radio	Hawa Radio	Paktia Ghag Radio	Zhwandoon Radio
2	0	0	1	0
20%	0%	0%	10%	0%

Table 2 illustrates the result of Q2, which shows that only two radio stations broadcast programs about creating awareness of climate change among farmers in Paktia province. Among them (20%) of the farmers selected the Paktia National Radio, (10%) selected the Paktia Ghag Radio, and no one selected the other three radio stations.

Table 3: What are the sources of climate change information available to farmers in Paktia Province?

Source	Radio	Television	Agricultural Cooperatives	Personal Observations
Respondents	3	1	1	5
Frequency	30%	10%	10%	50%

When the farmers were asked about the sources that disseminate information about climate change, results in Table 3 indicate that most farmers (50%) received information from sharing their observations. In addition, 30% of farmers selected radio, 10% selected TV, and 10% selected Agricultural Cooperatives, which are the sources that disseminate information about climate change in Paktia province.

Table 4: How has climate change affected the crops of farmers in Paktia province?

Lack of Water	High Temperature	Unseasonal Cold	Unseasonal Rains	Storm
5	2	4	3	1
50%	20%	40%	30%	10%

Results in Table 4 show that most farmers (50%) accepted that lack of water is the main reason for climate change, which directly affects their crops. Besides these, (20%) of the farmers believe that high temperature is also the cause of climate change. (30%) of the respondents believe that unseasonal rain, and (40%) of farmers

pointed out that unseasonal cold affected their yields. While (10%) of farmers pointed out that sometimes heavy storm affects their crops.

## Discussion

Radio is vital in creating awareness about climate change in third-world countries. Because of the four decades of social and political war, Afghanistan is also counted in the list of such categories. However, this research corroborates the findings of Nazari and Abu Hassan Hasbullah (2010) that lack of education is the main reason most residents listen to the radio in rural areas (Hasbullah, 2010). Besides this, researchers also found the same results as Nwagbara and his friend (2018): most farmers (50%) have less knowledge about climate change in Paktia province. Additionally, the study aligns with the findings of Nwagbara and colleagues' (2018) research results that in Paktia, only two radio stations, Pakita National Radio, and Paktia Ghag Radio, disseminate information about climate change (Nwagbara, 2018).

Moreover, this study contradicts the findings of Parvizian et al. (2011), namely, that radio and TV have played a vital role in creating awareness among farmers (Parvizian, 2001). In Paktia Province, most farmers learned about climate from sharing personal experiences. Sometimes, they receive information from the radio and a little from TV Programs. The study also revealed the same results as (Zaki, 2023) that droughts, rising temperatures, unseasonal colds, floods, and heavy storms affect the crops in Paktia Province.

## Conclusion

Climate change is a problem, with third-world nations bearing the brunt of its effects. Afghanistan falls into this category as well because it has a harsh socioeconomic situation despite not being a polluter. In these nations, radio is the sole form of mass media that is useful for raising awareness of climate change issues in rural areas. However, in Paktia Province, located in the eastern part of Afghanistan, most of its residents spend their living expenditures on field crops. Radio is the most effective mass communication medium in areas with low literacy rates, but sadly, these stations don't broadcast as much information about climate change awareness. The majority of farmers obtain information by exchanging firsthand accounts. They claimed that lack of water, Unseasonal cold, high temperatures, Unseasonal rains, and heavy storms were the main reasons that affected their yields.

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