





decreasing importance of our country's agriculture, food, natural resources, and environmental systems, in recent years, similarly all over the world, regarding where the food of the general public comes from or how it is produced, the decrease in clean water resources, climate change, desertification or the decrease of living species specific to Anatolia, it turns out that people know very little.

In recent years, due to the decrease in the importance of agriculture, food, natural resources, environmental systems, and rural areas in our country as well as all over the world, it has been revealed that people have very little knowledge about where food comes from and how it is produced, the extinction of living species unique to Anatolia, desertification, water scarcity, and climate change. At the same time, the lack of understanding of the majority of the population about the importance of the economic, political, social, environmental, and cultural impacts of agricultural issues and the links of agricultural production, which is essential for life, with natural resources and the environment is striking. The new interdisciplinary applied theoretical field that has emerged as a part of agriculture and communication literature is crucial for agricultural publics (Grunig et al., 1988), such as farmers and producers, as well as non-agricultural publics, such as consumers and media, which have been very active recently. Briefly, agricultural issues affect and concern Türkiye economically, politically, socially, culturally, environmentally, locally, and globally. Although studies on agricultural issues have been conducted on a specific subject in the literature, it is seen that these studies are not handled through a conceptual framework in the context of the academic discipline of agricultural communications. In addition, communication studies on agricultural issues are few and limited; they are not planned, systematic, or long-term. In this direction, it is a priority for this study to create academic awareness of the field of agricultural communications and to define the field, which is an applied theoretical field, to the literature. The study also reveals that the field needs to be transformed into an academic and professional field of expertise in our country.

In summary, agricultural communications draws attention as a new social sciences field in the literature. The primary aim of this study is to introduce the field of applied theoretical agricultural communications, which is developing in the world in our country, and to provide an infrastructure that will guide all studies in this field. For this reason, this study is prepared by compiling the information obtained from the literature review to make a conceptual framework for the field. In this context, the study is a review of the developing field as a part of the agriculture and communication literature. Therefore, this study brings the field that combines agriculture and communication disciplines to our literature and makes a unique contribution to communication sciences. In the study, first of all, the basic concepts of

communication and agriculture disciplines are explained, and the relationship between them is revealed. Then, the literature defining the applied theoretical agricultural communications field and the main areas in the field are included. As a result, the field is evaluated, and suggestions are made for future studies.

## Vjg"Eqpegrv"qh"Ci tkewnvtcn"Eq o o wpkecvkqpu"

### Ci tkewnvtg"cpf"Eq o o wpkecvkqp

Throughout history, agriculture and agricultural activities have been the primary sector in meeting and sustaining the needs of human life. Seljuks and Ottomans called it agriculture. It is derived from the Arabic word “felaha”, which also means “achievement, getting rid of a difficult situation” (Harputluoğlu, 2018, p. 1).

In the AGROVOC Multilingual Agricultural Thesaurus (2016; 2017), some of the definitions of agriculture in different languages are expressed as follows: (a) “a man-made artificialization of the natural environment to make it more suitable for the development of plant and animal species” (Diehl, 1984) to obtain raw materials for food, beverage, fiber, energy, clothing, construction, medicine, tools, or simply for aesthetic considerations; (b) “agriculture or farming is the cultivation and breeding of animals, plants and fungi for food, fiber, biofuel, medicinal plants and other products used to sustain and enhance human life”. Today, it is claimed that the perspectives on the concept have changed. Accordingly, the definition of agriculture also includes seedless and soilless plant production (Siyaset, Ekonomi ve Toplum Araştırmaları Vakfı, 2019).

Communication is a product of the way of human existence and a human-specific phenomenon that changes according to the developments in the way of human existence (Oskay, 1999, p. 7). According to Schramm (1963) “communication is not an academic discipline in the sense of physics or economics; rather, it is a discipline that brings many fields together at a crossroads, and it has remained as it is” (as cited in Lazar, 2009, p. 11). The sociological definition of communication is “the reciprocal transfer of knowledge, thoughts, and attitudes (messages) from the person(s) to person(s) using certain tools/media” (Aziz, 2016, p. 30).

The communication concept encompasses many meanings and is located at the intersection of many disciplines (Mattelart, A. & Mattelart, M., 2013). In this respect, hundreds of definitions of communication have been proposed in the last fifty years, but none have been entirely sufficient and satisfactory (Heath & Bryant, 2000). In short, the concept of communication is a difficult concept to define and frame. It can be stated that this concept,

seen to cover all areas of life by its nature, is widely used in the focus of attention of many branches of science in the literature and has various meanings. Therefore, it is not possible to limit the definition of the concept in terms of the richness of the meaning of concept. However, there are three critical points to discuss in the communication concept. First, there must be at least two parties for communication. These are the sender or the source and the receiver. The second is to aim for a consensus or partnership between the two parties. Third, communication has a process feature (Odabaşı & Oyman, 2017).

### **Vjg"G ogt i gpeg"qh"vjg"Eqpegrv"**

Communication is the most basic tool of human life and existence (Eroğlu & Yüksel, 2013, p. IV). In this context, many struggles that the first human being waged hundreds of thousands of years ago in the face of the nature and natural conditions of the age to continue his life created today's human life. For this struggle, people have had to use communication as the primary struggle tool for almost every period.

An integral part of human beings is the need for communication. The place of communication in the historical process has shown continuous development, and more importantly, it has shaped human life as the priority of human beings. The first human being, who naturally communicated with nature itself, became a part of the nature in which he lived; and integrated with an instinctive response against the effects and messages of nature in the struggle for survival. Thus, humans, as a part of nature, met their most basic and vital needs, such as food, shelter, and protection, by producing solutions with their instincts (Gönenç, 2012). Human beings try to produce their existence. With these production activities, they also enter into social, economic, and political relations with other people. According to the theory of historical materialism, people have lived in communities since the first periods of human history. The fact that people live as a society and engage in production activities has necessitated communication, and even communication has become the basic condition (Yaylagül, 2014). In this context, it can be predicted that communication had started since the periods when people existed in nature. Moreover, communication is the only phenomenon that allows the production of all materials and tools used to produce material life (Erdoğan, 2011), such as food, drink, clothing, or any material related to human existence. According to this, all kinds of actions that regulate the relations of human beings in maintaining their individual and social existence have been and continue to be possible with communication and interaction.

However, another condition for the existence and continuation of life was undoubtedly made possible by reaching the sufficient food necessary for human survival and the production

of food resulting from agriculture and agricultural activities that started with human existence. At this point, while it is remarkable that communication and agricultural activities are unique to humans, the fact that they are the most fundamental human activity shows their critical importance. Agriculture and communication are essentially indispensable tools for human life and existence. In this respect, it is undeniable that human beings maintain their existence, interact with other societies and structures, and their relationship with soil and agriculture, which are the sources of life.

According to the concepts of communication and agriculture, it is seen that the two main differences that distinguish humans from other living things are communication activities as well as agriculture and agricultural activities. Although agriculture and agricultural activities are vital and principal issues in every culture, it is known that human communication is also necessary for people who farm and create the culture in making all these possible. Human beings, who exist and create through communication, have survived through communication and conveyed feelings, thoughts, knowledge, and skills for thousands of years in that way.

Communication has also been an essential tool in transforming human and social life into systematic structures (Güngör, 2011, p. 36). The structure on which these human structures are dependent and have to be together in the maintenance of their existence is also the holistic structure consisting of natural resources and environmental systems in which they were born and lived. The vital needs of human beings, who are a part of this whole, are met by nature. Therefore, in this process, in addition to communication activities, natural or artificial interaction with natural resources and environmental systems is inevitably necessary for humans to continue their lives. In this direction, agricultural communications has emerged as a concept that regulates the interaction and coexistence of humans with agriculture and agricultural activities, natural resources, and environmental systems.

**EqpegrvwcñHtc o gy qtm"qh"Ci tlewnvwtcñ"Eq o o wpkcvkqpu"cu"cp"Cr rnkf"Vj gq tgvkecñ"  
Hkgnf"**

**Fghkppi"vjg"Hkgnf"**

Agricultural communications is a blended form of two different words, "agriculture" and "communication". Agricultural communications, which is any communication activity that regulates the relations between human beings with agriculture, food, natural resources, and environmental systems, has emerged as a part of agriculture and communication literature. In this context, it can be argued that these ancient human activities have been transferred from generation to generation, from society to society through communication and interaction for

thousands of years, developed each other, and revealed agricultural communications. Agricultural communications has taken its place in the world. Accordingly, the conceptual framework of the agricultural communications academic discipline has emerged as a combination of two different disciplines. In other words, agricultural communications is based on agriculture and communication literature and is fed from these two main disciplines. Therefore, the field that combines agriculture and communication literature constitutes the conceptual framework of the new academic discipline.

In this respect, agricultural communications can be expressed as a mixture of agriculture and communication definitions. Therefore, agricultural communications is “the exchange of information about agricultural and natural resource industries through effective and efficient media, such as newspapers, magazines, television, radio, and the Web to reach appropriate audiences” (Telg & Irani, 2012, p. 4).

It was in the early 1800s that agricultural communications began as a specialty. In the past, publications such as the *Agricultural Museum*, *The American Farmer*, and the *Breeder's Gazette* have been created by journalists, editors, and publishers who lead agriculture, such as John Stuart Skinner, to improve agriculture and farming practices (Tedrick, 2009). After nearly 200 years, agricultural communications has evolved into an industry responsible for developing and disseminating news and marketing information about food, agriculture, and environmental systems (Tucker et al., 2003).

Agricultural communications is any form of informative or commercial communication regarding agricultural products or industry (Neaves, 2016). Agriculture is an extensive term used to describe all parts of the food and natural resources system. Agriculture includes animals (livestock and domestic animals), food, nutrition, farming, and the environment. In agricultural communications, a few examples of an agricultural organization are a food manufacturer or distributor, such as an American Kellogg or a trader, an environmental nonprofit, or a farmer group. Many media companies or institutions seek journalists or communicators to cover agricultural issues. Communication includes public relations, advertising, journalism, and video/radio production (Colorado State University, n.d.). Currently, agricultural communications has evolved into a wide range of communications, including print journalism and radio/television broadcasting, writing and reporting, public relations, strategic communications, online and social media, marketing, and branding (Irani & Doerfert, 2013). Also, agricultural communications as a field includes advertising, public relations, extension information services, organizational communication, and other non-journalistic aspects (Zumalt, 2007). Agricultural communications professionals convey agriculture and

environmental issues to consumers, legislators, and key stakeholders. The discipline of agricultural communications aims to understand specialized agricultural science and information and communicate it through journalism, advertising, public relations, graphic design, and telecommunications (University of Georgia, n.d.).

In agricultural communications, agriculture is broadly defined to include not only farming but also food, nutrition, livestock, rural issues, and natural resources. In this context, agricultural communications is a field that focuses on communication between agricultural stakeholders and non-agricultural stakeholders about agricultural information (<https://en.wikipedia.org/>). Accordingly, agricultural communications reach the agricultural publics and the general public using multiple forms of communication. Similarly, Sprecker & Rudd (1997) state that agricultural communications, by its nature, is an interdisciplinary effort based on basic concepts in the fields of agriculture and communication (as cited in Tucker et al., 2003); and also, agricultural communicators are not agriculturalists, they are communicators with special knowledge about agriculture and food issues, problems and technologies (as cited in Maples, 2018).

As a result, agricultural communications has become a powerful tool to disseminate information about a vital industry in the world and one of the most important disciplines in the agricultural community (Idowu, n.d.). The field is an interdisciplinary social science specialization that deals with applied communication and technologies for the advancement of agriculture. Besides, agriculture includes production, processing, marketing, consumption, and nutritional well-being, and the complexity of these and similar agricultural issues can be found in all forms of media. In this respect, agricultural communicators inform people, especially groups of people, about what they need to know about agriculture (Agunda, 1989).

### **V j g F g x g n q r o g p v " q h " v j g H k g n f " c u " C p " C e c f g o k e " F k u e k r n k p g "**

Agricultural communications is an academic discipline and a professional field with historical roots dating back to the Morrill Act<sup>1</sup> of 1862 and even earlier. The development of agricultural communications as an industry is due to the fact that agricultural messages reach agricultural audiences through agricultural publications, bulletins and weekly rural newspapers, agricultural news, articles, and mass media channels (Telg & Irani, 2012). John Stuart Skinner began publishing the first regularly published farm journal, *The American Farmer*, in 1819. *The Farmer's Almanac* was first published in 1792 and is still being published

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<sup>1</sup>The Morrill Act (<https://www.history.nd.gov/>) signed by Abraham Lincoln in 1862, contributed to the establishment of colleges in engineering, agriculture, and military science in each state.



today. Over the next two centuries, agricultural journalists and editors expanded their roles and presented information to a growing number of different audiences, publications, and online dissemination. Today, agricultural communicators include those who advocate and promote on behalf of agriculture and natural resources organizations in the public and private sectors (Irani & Doerfert, 2013). The early examples, called pioneers of agricultural communications, also show how agricultural journalism evolved from the need to provide information on agriculture and household management in isolated rural areas (Tucker et al., 2003).

The first agricultural communications lessons in the United States arose with the need to disseminate discovered information from agricultural research centers (Boone et al., 2000). Therefore, agricultural journalism was established as an academic discipline, and the first course in the field was given at Iowa State in 1905; In 1908, the University of Wisconsin founded the Department of Agricultural Communications and offered a bachelor's degree in agricultural communications (Tedrick, 2009). Today, 26 higher education institutions offer major, minor, and specialization in the discipline of agricultural communications (Miller et al., 2015). Much of the early work was presented by professional writers and editors recruited from the private sector by newly established journalism schools. According to Ogilvie et al. (1927) and Rogers (1926), during this period, a series of textbooks were published to support education in the developing field (as cited in Tucker et al., 2003).

The agricultural communications discipline has been developing for nearly two centuries. Education and expertise in agricultural issues have also emerged and developed in the United Kingdom, unlike their past counterparts in the United States (Maples, 2018). Agricultural education in the United Kingdom was established in 1845 by The Royal Agricultural University (RAU). RAU motto is "Arvorum Cultus Pecorumque" a quote from Latin poet Virgil's *Georgics*, which means "Caring for the Fields and the Beasts" (RAU, n.d.). As a result, the academic and professional development of agricultural communications has emerged from the communication need of agriculture, which is a strategic sector for countries and societies, such as in the United States, and the United Kingdom, and all over the world, and has continued as a growing need until today.

Since 1913, with the adaptation of the discipline to the field, associations, and journals such as the American Association of Agricultural College Editors (AAACE)-later renamed Agricultural Communicators in Education (ACE)- and the Journal of Applied Communications (JAC) have published literature representing issues and problems affecting the discipline (Williford et al., 2016).

## Vjgqt{"cpf"Oqfgnu"Wugf"kp"Citkewnwvtcn"Eq o o wpkecvkqpu"

Understanding the use of communication channels or media and evaluating and predicting the results of the communication process plays an essential role in the academic discipline of agricultural communications, which is an applied theoretical field. Exposure to or using various communication media or channels is considered a prerequisite for any effect of media content on people. Therefore, it is possible to say that the effect of any medium in a communication process or message depends not only on the type of media but also on how it is used. In this direction, the theories and models used in the applied field have been compiled from the literature.

Generally, the most used theory in studies of agricultural communications is the Framing Theory. Other theories most commonly used in studies are the Diffusion of Innovations and the Uses and Gratifications Theory. Theories frequently used in the field are Agenda Setting, Excellence in Public Relations, and the Theory of Planned Behavior. In addition, Experiential Learning, Elaboration Likelihood Model, Gatekeeping, Semiotic Theory, and Technology Acceptance Model are other common theories and models used in the field (Baker and King, 2016).

## Vjg"Ockp"Ctgcu"qh"Citkewnwvtcn"Eq o o wpkecvkqpu"

The main areas of agricultural communications require the general public to have knowledge of agricultural issues. Agricultural activities as a human activity and related issues are the main areas of agricultural communications, including agricultural extension, agricultural education, agricultural literacy, agricultural advocacy, risk and crisis management in agriculture, food, natural resources, and environmental systems, as well as rural issues. The applied field is based on theories and models used in the social sciences.

## Citkewnwvtcn"Gzvcpukqp"cpf"Citkewnwvtcn"Gfwecvkqp"

Extension, in general, is a function that can be applied to various areas of society. It is applied in agriculture, rural development, industry, health, and education sectors. Agricultural extension is used within a broad information system that includes research and agricultural education. In the process of extension, four main elements can be identified; knowledge and skills, technical advice and information, farmers' organization, and motivation and self-confidence (Food and Agriculture Organization of the United Nations, n.d.). Agricultural extension is "a service or system which assists farm people, through educational procedures in improving farming methods and techniques, increasing production efficiency and income,

bettering their levels of living, and lifting the social and educational standards of rural life” (Maunder, 1972, p. 3). It is also any kind of out-of-school education system (service) organized for people living in rural areas (Oakley & Garforth, 1985). This service includes providing advice and information for farmers to solve their problems. They are activities related to disseminating research results and making suggestions to farmers about agricultural practices, increasing their analytical capacity, and communicating to help farmers make decisions about their businesses (Reijntjes et al., 1992).

Agricultural communications was first developed to disseminate information from Agricultural Experiment Stations to the public (Telg & Irani, 2012). However, agricultural extension is a partial part of agricultural communications. Agricultural communications is broader than agricultural extension. In agricultural communications, technical and educational studies for agricultural stakeholders are carried out as agricultural extensions. Agricultural extension has multiple purposes. The most important of these is to enable farmers to help themselves, which is the main philosophy of agricultural extension. In addition, the agricultural extension provides technical services to the people engaged in agriculture; also, it is an out-of-school education system, and this education is based on volunteerism.

It is accepted that the first agricultural communicators were scientists who worked at grant-land universities and published their work. In this context, its history largely coincides with agricultural communications; because they both share some of the same philosophical goals to help improve the lives of society. However, both have different roles in the dissemination of agricultural information. The role of the agricultural communicator is crucial to the history of the Cooperative Extension Service, the history of land allocation, and the history of agriculture. Agricultural communications has evolved from conveying specific information to an agricultural society through agricultural extension and agricultural media to conveying misunderstood, misinterpreted, scientific information to a non-agricultural society through content-laden media channels in the last century (Boone, et al., 2000).

Agricultural education teaches agriculture, food, and natural resources (National Association of Agricultural Educators, n.d.). In this context, agricultural education interests “the needs of individuals and groups and in developing individually satisfying and socially responsible knowledge, skills, and occupational values. Such a focus recognizes the value of, and relies heavily on, experiences as the context in which knowledge and skills are learned” (Encyclopedia).

Agricultural education is also important for both agriculture and non-agricultural professions. The necessary knowledge and skills in agriculture are gradually increasing and

becoming more evident. While the occupation of the majority of the population was agriculture and farming, much basic agricultural information was commonplace or easily obtained. However, the agricultural knowledge and skills necessary for practical applications for a living, effective citizenship, and professional benefit are no longer ordinary, commonplace, or easily obtainable (Olafare, 2003).

### Citkewnwtcn"Nkvgtce{"cpf"Citkewnwtcn"Cfxqece{"

Agricultural literacy can be briefly expressed as having knowledge or education about fundamental agricultural issues. However, the general definition of agricultural literacy, which is agreed upon and widely used in the literature, is as follows:

“Possessing knowledge and understanding of our food and fiber system. An individual possessing such knowledge would be able to synthesize, analyze, and communicate basic information about agriculture. Basic agricultural information includes the production of plant and animal products, the economic impact of agriculture, its societal significance, agriculture's important relationship with natural resources and the environment, the marketing of agricultural products, the processing of agricultural products, public agricultural policies, the global significance of agriculture, and the distribution of agricultural products” (Frick et al., 1991: 52).

Agricultural literacy is defined as having the ability to understand and communicate the source and value of agriculture as it affects our quality of life (National Agriculture in the Classroom Organization, 2013). An agriculturally literate society can see beyond emotional cravings and make informed agricultural decisions on these issues. A society that understands agriculture and its current economic, social, and environmental impacts can provide the necessary support and reduce the current challenges of agriculture by making good decisions (Kovar & Ball, 2013). In this context, an agriculturally literate person understands the relationship between agriculture and the environment, food, fiber, energy, animals, lifestyle, economy, and technology (American Farm Bureau Foundation for Agriculture, 2019).

Agriculture is vital for economic, environmental, and cultural growth, but agricultural news is surprisingly a neglected topic in the mass media. With the gradual decline of the agricultural society, the coverage of agriculture news in the mass media has narrowed, and even now, the scope of agriculture is mostly discussed in terms of consumers and the environment (Boone et al., 2000). In the last decade, agricultural education and communication researchers have investigated the current agricultural literacy problem and suggested using

mass media as the potential solution to this problem, which can be expressed as an epidemic. It is challenging to create an agriculturally literate public in terms of societies moving away from agriculture and consumers whose way of seeing agriculture has changed in understanding or appreciating the place and importance of agricultural production in human life. However, the changes in agriculture and the impact of agriculture on the economy necessitate the communication of agriculture to create agriculturally literate people. At this point, agricultural educators and communicators are faced with education and communication efforts.

Today the media is the primary information tool for the general public, especially in agriculture, where most of the public has no direct experience (Rogers, 1995). In this context, particular importance and scope should be given to agriculture communications for agricultural literacy. Although creating an agriculturally literate society focuses on media coverage of agricultural issues, it may not be the only solution to this challenge. Policymakers and consumers also need to be agriculturally literate to respond appropriately if problems arise (Frick et al., 1995). In this respect, agricultural literacy is more critical and prioritized not only for the general public but especially for the person or persons involved or authorized in the factors that affect the economic, political, environmental, and social lives of societies.

Advocacy is defined as “the work of making the defense” (Turkish Language Association, n.d.). In the United States, “advocacy” and “advocate” have recently emerged from the combination of the words “agriculture/agricultural” and “advocate/advocacy”. Although studies on this terminology and concept are expected soon, it is claimed that large-scale agribusinesses, such as Bayer, will use this term to describe advocacy regarding their agricultural goals or initiatives (Kostelich, 2019).

Advocacy in agricultural communications is the concept of promoting anything on agricultural topics to target audiences, persuading something, and maintaining, changing, or correcting the current result. By its very nature, advocacy involves communication and persuasion processes. At this point, public relations and promotion activities come to the fore in agricultural communications. The advocacy and public relations definitions are both about actively promoting an issue or cause. Advocacy is a chosen action for change. It includes raising support for a cause, raising funds, and trying to make members of a community part of an organized event or program (McHale, 2004). According to Cutlip et al. (1985), public relations efforts are used to engage the public to raise awareness about an organization promoting a product, service, or cause. The relationships created and maintained determine the success of the promotional efforts carried out on behalf of the organization (as cited in Meyers et al., 2011).

According to Shin & Cameron (2003), public relations practitioners fulfill their strategic goals in the role of advocacy while serving as one of the most effective sources of information, thanks to their ability to provide information to journalists (as cited in Ruth, 2005). Advocacy in agricultural communications or agricultural advocacy begins with agricultural literacy. In this respect, it seems that agricultural communications issues need strong advocates today more than ever. Agricultural advocacy is to promote agricultural issues at all levels, from household to government, by using various communication and persuasion methods and communication tools to inform the public and consumers about the importance and value of agricultural issues such as food, fiber, energy, environment, and natural resources, and how agriculture affects human life. It is a set of actions designed to protect, modify and regulate.

### **Tkum"cpf"Etuku"Ocpig o gpv"kp"Citkewvwtcn"Eq o o wpkecvkqpu"**

Definitions of risk communication are generally similar to the definition expressed by Covello (1992) as “the process of exchanging information among interested parties about the nature, magnitude, significance, or control of a risk” (p.359). On the other hand, a crisis can be defined as an event that, when mishandled, is a major unforeseen threat that can negatively impact the institution, industry, or stakeholders (Coombs, 2012). A crisis is unpredictable; however, it cannot be said that it is an unexpected situation. Similar to definitions of risk, definitions of crisis share many common elements, including the idea that the threat posed by the event is at least serious and often catastrophic or that the actual timing of the event is often unpredictable, if not unexpected. Risk management and crisis management include common themes of assessment and control of risk or crisis to achieve a successful outcome or at least minimize the damage from the event (Walaski, 2011). On the other hand, due to the rise in risk communication, it is seen that crisis communication studies have also emerged. Crisis communication, often combined with risk communication, is a separate field with its own problems and concerns; however, it may include aspects of risk communication (Sheppard et al., 2012).

There are many existing problems, such as epidemics in agricultural production and animal husbandry, a crisis caused by insects or natural disasters, toxic substances, contamination of drinking water, food safety risks like Salmonella, and pesticides or climate change, air pollution, global warming, hunger, and nutritional deficiency due to the increase in the world population. Threats in the near future refer to all kinds of crises, risks, and dangers experienced or to be experienced in agriculture, food, natural resources, and environmental systems. For this reason, risk and crisis communication has recently become an area of interest

for researchers, and the studies have also become the focus of agricultural communications researchers and professionals due to the increasing health, environmental and social crises related to food and agriculture (Cannon et al., 2016).

In this context, the main studies in the area of risk and crisis management examine the existing and potential risk and crisis communication scenarios in agriculture, the environment, and natural resources necessary for human survival and life. Thus, theories, models, and processes that effectively deal with such situations or issues constitute the whole of activities related to agricultural and non-agricultural audiences.

### **Eqpenwukqp"**

In this study, the agricultural communications discipline, which has developed worldwide as a part of the agriculture and communication literature, has been revealed by examining comprehensive literature. Due to the increasingly strategic and critical importance of agriculture, food, natural resources, environmental systems, and rural issues for our country and the world, a conceptual framework has been presented to guide academic studies. Thus, in the context of the applied theoretical field as a whole, the main deficiency in the literature on the discipline, which deals with agricultural issues from a specific perspective, is tried to be eliminated. Also, the ground is prepared for academic studies on agricultural issues.

Therefore, there is a need to create academic awareness of the applied theoretical field related to hunger, food waste, sustainability, rural development, environmental issues, and other agricultural issues. In addition, there is a need for specific publications in Türkiye that expand the discipline of agricultural communications and examine agricultural issues as a whole with a specific perspective. Moreover, conducting studies specifically for agricultural and non-agricultural audiences in the field is another need. In this context, supporting academic and professional development in the applied theoretical field related to strategically important agricultural issues in our country and defining the field as a specialization is evaluated. In this direction, the economic, political, social, environmental, and cultural factors affecting agricultural issues should be considered as a field of expertise in the context of agricultural communications. In addition, it is recommended to carry out studies at local and global levels in this applied field, as it will provide significant contributions and benefits to the literature and our country, which is an agricultural country.

**Tghgtgpegu"**

- Agrovoc Multilingual Agricultural Thesaurus, Available at: <https://www.fao.org/agrovoc/>, Accessed: 22.12.2019.
- Agunda, R. (1989). Communicating with the Audience in Mind, *Journal of Applied Communications*, 73(2), pp.17-24.
- American Farm Bureau Foundation for Agriculture (2019). What is ag literacy?, Available at: <https://www.agfoundation.org/what-is-ag-literacy>, Accessed: 27.12.2019.
- Aziz, A. (2016). *İletişime Giriş* (5. Edition), İstanbul: Hiperlink Yayın.
- Baker, L. M. & King, A. E. H. (2016). Let's Get Theoretical: A Quantitative Content Analysis of Theories and Models Used in The Journal of Applied Communications. *Journal of Applied Communications*, 100(1), pp. 51-63.
- Boone, K., Meisenbach, T. & Tucker, M. (2000). *Agricultural Communications: Changes and Challenges*, Ames: Iowa State University Press.
- Cannon, K. J., Specht, A.R. & Buck, E. B. (2016). Agricultural Communications: A National Portrait of Undergraduate Courses. *Faculty Publications: Agricultural Leadership, Education & Communication Department*, 80, pp. 22-32.
- Colorado State University (n.d.). Agricultural Communication, Available at: <https://journalism.colostate.edu/agricultural-communication/>, Accessed: 17.7.2019.
- Coombs, T. (2012). *Ongoing Crisis Communication: Planning, Managing, and Responding* (3. Edition), Thousand Oaks, CA: Sage.
- Covello, V. T. (1992). Risk Communication: An Emerging Area of Health Communication Research. *Annals of The International Communication Association*, 15(1), pp. 359-373.
- Diehl, R. (1984), "AGROVOC Multilingual Thesaurus", Available at: [http://agrovoc.uniroma2.it/agrovoc/agrovoc/en/page/c\\_203](http://agrovoc.uniroma2.it/agrovoc/agrovoc/en/page/c_203), Accessed: 22.12.2019.
- Encyclopedia.com, Available at: <https://www.encyclopedia.com/education/encyclopedias-almanacs-transcripts-and-maps/agricultural-education>, Accessed: 16.10.2020.
- Erdoğan, . (2011). *İletişimi anlamak* (4. Edition), Ankara: Pozitif Matbaa.
- Ero lu, E. & Yüksel, A. H. (2013). Önsöz, (Eds.), Erhan Ero lu and Ahmet H. Yüksel. *Etkili İletişim Teknikleri*, Eskişehir: Anadolu Üniversitesi Açıkö retim Fakültesi Yayınları, No: 1733, p. IV.
- Food and Agriculture Organization of The United Nations (FAO), Available at: <http://www.fao.org/3/t0060e/T0060E03.htm>, Accessed: 22.12.2019.



- Frick, M. J., Birkenholz, R. J. & Machtmes, K. (1995). Rural and Urban Adult Knowledge and Perceptions of Agriculture, *Journal of Agricultural Education*, 36(2), pp. 44-53.
- Frick, M. J., Kahler, A. & Miller, W. (1991). A Definition and The Concepts of Agricultural Literacy. *Journal of Agricultural Education*, 32(2), pp. 49-57.
- Gönenç, Ö. E. (2012). İletişimin Tarihsel Süreci. *İstanbul Üniversitesi İletişim Fakültesi Dergisi*, 28, pp. 87-102.
- Grunig, J. E., Nelson, C. L., Richburg, S. J. & White, Terry J. (1988). Communication by Agricultural Publics: Internal and External Orientations, *Journalism Quarterly*, 65(1), pp. 26-38.
- Güngör, N. (2011). *İletişim Kuramları ve Yaklaşımları*, Ankara: Siyasal Kitabevi.
- Harputluoğlu, M. (2018). Türkiye'nin Tarım Politikası, *Uluslararası Gözlem ve Stratejik Araştırmalar Merkezi*, Available at: <http://ugsam.org/turkiyenin-tarim-politikasi/>, Accessed: 31.1.2018.
- Heath, R. L. & Bryant, J. (2000). *Human Communication Theory and Research: Concepts, Contexts, and Challenges*, New Jersey: Lawrence Erlbaum Associates.
- Idowu, A. (n.d.). "AED 709 History of Agricultural Communication", Available at: [https://www.academia.edu/36898693/AED\\_709\\_history\\_of\\_agricultural\\_communication](https://www.academia.edu/36898693/AED_709_history_of_agricultural_communication), Accessed: 30.5.2019.
- Irani, T. & Doerfert, D. L. (2013). Preparing For the Next 150 Years of Agricultural Communications. *Journal of Applied Communications*, 97(2), pp. 6-13.
- Kostelich, C. (2019). Facebook and a Farm Crisis: FFA and Online Agricultural Advocacy. *Open Library of Humanities*, 5(1)/10, pp. 1–31.
- Kovar, K. A. & Ball, A. L. (2013). Two Decades of Agricultural Literacy Research: A Synthesis of The Literature. *Journal of Agricultural Education*, 54(1), pp.167-178.
- Lazar, J. (2009). *İletişim Bilimi* (2. Edition) (C. Anık, Trans.), Ankara: Vadi Yayınları.
- Maples, S. K. (2018). *Introducing The Academic Discipline of Agricultural Communications to The United Kingdom: A Needs Analysis* [Master's Thesis, University of Arkansas]. Arkansas.
- Mattelart, A. & Mattelart, M. (2013). *İletişim Kuramları Tarihi* (M. Zıllıoğlu, Trans.), İstanbul: İletişim Yayınları.
- Mauder, A. H., (1972). *Agricultural Extension: A Reference Manual*, Roma: Food and Agriculture Organization of the United Nations (FAO).
- Mccomas, K. A. (2006). Defining Moments in Risk Communication Research: 1996-2005. *Journal of Health Communication*, 11(1), pp.75-91. doi:10.1080/10810730500461091 .

- Mchale, J. P. (2004). *Communicating for Change: Strategies of Social and Political Advocates*, Rowman & Littlefield.
- Meyers, C., Irlbeck, E., Graybill-Leonard, M. & Doerfert, D. (2011). Advocacy in Agricultural Social Movements: Exploring Facebook as a Public Relations Communication Tool. *Journal of Applied Communications*, 95(3), pp. 68-81.
- Miller, J. D., Large, M. M, Rucker, J. K., Shoulders, K. & Buck, E. B. (2015). Characteristics of U.S. Agricultural Communications Undergraduate Programs, *Journal of Applied Communications*, 99(4), pp. 76-90.
- National Agriculture in The Classroom Organization, Available at: [http://agclassroom.org/affiliates/doc/logic\\_model.pdf](http://agclassroom.org/affiliates/doc/logic_model.pdf), Accessed: 14.7.2019.
- National Association of Agricultural Educators, Available at: <https://www.naae.org/whatisaged/index.cfm>, Accessed: 22.12.2019.
- Neaves, D. N. (2016). *A Global View of Agricultural Communications* [Master's Thesis, Texas Tech University]. Texas.
- Oakley, P. & Garforth, C. (1985). *Guide To Extension Training*, Roma: Food and Agriculture Organization of The United Nations (FAO).
- Odabaşı, Y. & Oyman, M. (2017). *Pazarlama İletişimi Yönetimi*, İstanbul: MediaCat Kitapları.
- Olafare, O. (2003, September). Agricultural Education: An Instrument for Improving Agricultural Operations and Environmental Sustainability. *XII World Forestry Congress*, 21-28 September 2003, Canada. Available at: [https://www.fao.org/3/XII/0611-C4.htm#P28\\_106](https://www.fao.org/3/XII/0611-C4.htm#P28_106), Accessed: 8.11.2019.
- Oskay, Ü. (1999). *İletişimin ABC'si* (2. Edition), İstanbul: Der Yayınları.
- Reijntjes, C., Haverkort, B. & Waters-Bayer, An. (1992). *Farming For the Future: An Introduction to Low-External-Input and Sustainable Agriculture*, London: Macmillan Education.
- Rogers, E. M. (1995). *Diffusion of Innovations* (4. Edition), New York: The Free Press.
- Royal Agricultural University (RAU), Available at: <https://www.rau.ac.uk/about-us/organisation>, Accessed: 12.4.2019.
- Ruth, A. M. (2005). *Sources of Agricultural News: The Media Relations Environment of Agricultural Communication Professionals*, [Doctoral Dissertation, University of Florida]. Florida.
- Sheppard, B., Melissa, J. & Brooke, L. (2012). *Understanding Risk Communication Theory: A Guide for Emergency Managers and Communicators*, College Park: Human

- Factors/Behavioral Sciences Division, Science and Technology Directorate, U.S. Department of Homeland Security.
- Siyaset, Ekonomi ve Toplum Ara tirmalari Vakfi (SETA). (2019), “Türkiye Tarımına Yeniden Bakı Raporu”, Available at: <https://setav.org/assets/uploads/2019/04/137R.pdf>, Accessed: 20.1.2019.
- State Historical Society of North Dakota, Available at: <https://www.history.nd.gov/>, Accessed: 1.11.2022.
- Tedrick, B. (2009). “An Abbreviated Timeline in The Development of Agricultural Communications”, Available at: <https://aceweb.org/agricultural-communications-timeline/>, Accessed: 19.12.2019.
- Telg, R. & Irani, T. (2012). *Agricultural Communications in Action: A Hands-On Approach*, USA: Delmar.
- Tucker, M., Whaley, S. R. & Cano, J. M. (2003). Agricultural Education and Agricultural Communications: Striking A Proper Balance in the Academy, *Journal of Agricultural Education*, 44(1), pp. 22-30.
- Turkish Language Association (TDK), Available at: <https://sozluk.gov.tr/>, Accessed: 17.4.2019.
- University of Georgia (n.d). College of Agricultural and Environmental Sciences (CAES). Available at: <https://www.caes.uga.edu/students/undergraduate-programs/majors/agricultural-communication.html>, Accessed: 15.12.2019.
- Walaski, P. (2011). *Risk and Crisis Communications*, New Jersey: John Wiley & Sons.
- Wikipedia, Available at: <https://en.wikipedia.org/>, Accessed: 22.12.2019.
- Williford, B. D., Edgar, L. D., Rucker, K. J. & Estes, S. (2016). Literature Themes from Five Decades of Agricultural Communications Publications. *Journal of Applied Communications*, 100(1), pp.64-75.
- Yaylagül, L. (2014). *Kitle İletişim Kuramları: Egemen ve Eleştirel Yaklaşımlar*, Ankara: Dipnot Yayınları.
- Zumalt, J. R. (2007). Identifying the Core Periodical Literature of the Agricultural Communications Documentation Center. *Journal of Agricultural & Food Information*, 8(3), pp. 43-63.