Marmara Üniversitesi Siyasal Bilimler Dergisi • Marmara University Journal of Political Science • Cilt 10, Sayı 1, Mart 2022, ISSN 2147-6926, ss. 78-97 • DOI: 10.14782marmarasbd.757510

RESEARCH ARTICLE / ARAŞTIRMA MAKALESİ

Multilayered Framing in Turkish Anti-GM Movement

Türk GDO Karşıtı Hareketinde Çok Katmanlı Çerçeveleme

Barış Gençer BAYKAN*

Abstract

Studies on framing between local and global contexts mostly focus on the ways in which local actors draw upon universalizing claims. Political and economic processes within which the GMOs are produced, traded and regulated invite an exploration of different scales – from local to national, from regional to global. This study aims to analyze the multilayered framing activities of Turkish anti-GM mobilization. In October 2004, 'No to GMOs Platform' (GDO'ya Hayır Platformu) in Turkey organized the Monster Tomato Tour which was the continuation of Friends of the Earth's Bite Back Campaign against the World Trade Organization ruling on GMOs. Platform activists defined their strategy by linking GMOs with environmental, agricultural, and economic issues that are relevant to Turkish political and economic realities and resonate with a larger frame in relation to global aspects of the controversy. Based on interviews with key national and local anti-GM activists in 12 cities conducted between 2007 and 2009, this paper probes how and why core tasks of framing process – diagnostic, prognostic, motivational – relate to local, national, and global scales. The Turkish anti-GM movement developed i) diagnostic frames, identifying a problem and attribute blame at *global scale* ii) prognostic frames, offering actions and plans at *national scale* iii) motivational frames being a rationale for action mainly at the local scale. The movement bridged a vast political space by framing the GM issue in a multilayered way by interpreting the grievances and claims locally, nationally, and globally. The movement represents a broad coalition of environmental and health concerns, agriculture issues and consumer rights. Activists were able to create a coherent narrative by connecting different scales towards a nation-wide ban on GMOs.

Keywords: GMOs, Social Movements, Environmental Movements, Framing, Biotechnology

Öz

Yerel ve küresel bağlamlar arasında çerçeveleme üzerine yapılan çalışmalar çoğunlukla yerel aktörlerin evrenselleştirici iddialardan yararlanma yollarına odaklanırlar. GDO'ların üretildiği, ticaretinin yapıldığı ve düzenlendiği siyasi ve ekonomik süreçler, yerelden ulusala, bölgeselden küresele farklı ölçeklerin araştırılmasını gerektirmektedir. Bu çalışma, Türk GDO karşıtı hareketin çok katmanlı çerçeveleme faaliyetlerini analiz etmeyi amaçlamaktadır. 2004 yılı Ekim ayında GDO'ya Hayır Platformu, Friends of the Earth'ün Dünya Ticaret Örgütü'nün GDO'larla ilgili kararına karşı geliştirdiği

* Yeditepe University, İstanbul, Turkey, E-mail: baris.baykan@yeditepe.edu.tr, ORCID: 0000-0002-3018-5339

Gönderim Tarihi / Submitted: 24.06.2020
Kabul Tarihi / Accepted: 02.12.2021

Bite Back Bite Back kampanyasının devamı niteliğindeki Canavar Domates Turu'nu Türkiye'de düzenledi. Platform aktivistleri, stratejilerini GDO'ları Türkiye'nin siyasi ve ekonomik gerçekleriyle ilgili çevresel, tarımsal ve ekonomik konularla ilişkilendirerek ve tartışmanın küresel boyutlarıyla ilgili olarak daha geniş bir çerçevede yankı uyandıracak şekilde tanımladılar. 2007 ve 2009 yılları arasında 12 şehirde ulusal ve yerel GDO karşıtı aktivistlerle yapılan görüşmelere dayanan bu makale, çerçeveleme sürecinin temel görevlerinin (diagnostik, prognostik, motivasyonel) yerel, ulusal ve küresel ölçeklerle nasıl ve neden ilişkilendiğini araştırmaktadır. Türkiye'de GDO karşıtı hareket, sorunu ve sorumluluğu küresel düzeyde tanımlayarak diagnostik çerçeveler gerçekleştirilecek eylemleri ve planları ulusal düzeyde önererek, prognostik çerçeveler ve son olarak eylem gerekçelerini yerel düzeyde oluşturarak motivasyonel çerçeveler geliştirdi. Hareket, çevre ve sağlık sorunları, tarım sorunları ve tüketici haklarının geniş bir koalisyonunu temsil etti. Sorunları ve talepleri yerel, ulusal ve küresel olarak yorumlayarak GDO sorununu çok katmanlı bir şekilde çerçeveleyerek geniş bir siyasi alan arasında köprü kurdu. Aktivistler, GDO'ların ülke çapında yasaklanmasına yönelik farklı ölçekleri birbiriyle ilişkilendirerek tutarlı bir anlatı yaratmayı başardı.
Anahtar Kelimeler: GDO'lar, Toplumsal Hareketler, Çevre Hareketleri, Çerçeveleme, Biyoteknoloji

1. Introduction

It is nearly a quarter of a century now since the first commercialization of genetically modified (GM) crops. Main GM crops are soybean, cotton, corn, and canola. Over the years, around thirty countries – both developed and developing – planted biotech crops. The US, Brazil, Argentina, Canada, and India together monopolize 91% of the world's GM crop fields. In 2018, 191.7 million hectares of GM crops were grown worldwide which is equivalent approximately to 4% of global total agriculture area. (ISAAA, 2018)

In many parts of the world concerned citizens are questioning the risks that agro-biotechnology may bring. One of the reasons behind its controversial character is that it may have diverse repercussions on various areas of modern life (Gaskell and Bauer, 2001). Citizens protest the increasing power of multinational corporations, agricultural biodiversity loss, the health effects on humans and as a consequence they stand up for small farmers' right to save seeds for themselves and consumers' right to know emphasize the need for a democratic control over technological innovations.

Activists engage in GM crop-trashing action in fields, lobby primary food dealers to reject GM-foods, urge institutions to administer precautionary principles, lobby various scales of government to apply a GM ban and challenge the scientific claims of corporations and governmental departments and declare GM-Free zones and regions. (Ansell, Maxwell&Sicurelli,2006; Doherty&Hayes,2012; Doherty&Hayes, 2014; Pearson, 2012; Tokar, 2001; Krom, Dessein&Erbout, 2014). Protests against the cultivation of GM plants in Europe before 1996 were mostly confined to sporadic local campaigns against GM experimental fields (Kettnaker, 2001). When the very first transgenic seed from the US arrived in Europe, anti-GM groups started to pressure the European Union. While the first wave of protest (1996-1997) developed mainly in Central Europe (Germany, Switzerland, Austria), the second wave (1998) gained momentum in Britain and France. Seifert questions the Europeanization of the Anti-GM Movement through analyzing protest events between 1995 and

2009 in Austria, France, Germany, Spain and the UK and concludes that only a small fraction of the movement capitalizes the opportunities at transnational level, the majority of anti-GM groups turn to their national and sub-national government (Seifert, 2017). The anti-GMO movement in the U.S pushed for GMO labeling after 2010s and failed in some western states in ballot referenda for labeling while enjoying certain victories in legislative campaigns in northeastern states between 2012 and 2014 (Velardi&Selfa, 2020).

A colossal Monster Tomato, between November 2003 and April 2004, traveled across Europe emphasizing the potential hazards of GM products. It was organized as part of an international campaign called "Bite Back" launched by the Friends of the Earth International with the support of Action Aid Alliance, Public Services International. This campaign urged citizens to petition the WTO by sending their individual Citizens' Objections claiming that their freedom to reject GMO should not be undermined and that the US complaint at the WTO against the EU for its restrictions on GMOs be dismissed.

In March 2004, fifteen representatives of grassroots environmental organizations of AKÇEP (Mediterranean Environmental Platform) visited Brussels. It was sponsored by Heinrich Boll Stiftung Turkey in cooperation with its Brussels Bureau. The HBS played a brokerage role between the parties and the aim was to create an experience sharing opportunity between Turkish environmental activists and representatives of the European Green Parties and environmental organizations. Although there was no FoE affiliated group in Turkey, organizers of the Bite Back campaign decided to launch it in Turkey.

In February 2004, a small group of environmental activists and organic farmers launched the "Platform of Ecological Movements". They issued the "Life cannot be patented" Declaration. This initiative quickly evolved into 'No to GMOs Platform' involving over 90 environmental organizations, consumer rights groups, farmers' groups, and individual scientists. The Platform engaged in awareness-raising activities such as seminars, training, launched petition campaigns and organized demonstrations against the GMOs. Throughout October, the Platform organized the Monster Tomato Tour in Turkey. Activists visited 15 cities to raise awareness about the risks of GMOs. This campaign, as a nation-wide tour around an international and controversial issue in cooperation with a transnational NGO, national organizations, and loose local networks, was a quite rare phenomenon in the history of Turkish environmental mobilization.

Turkish environmentalism developed in the post-1980 period addressing urban issues in major cities, industrial pollution, and conservation of natural and historical heritages (Adem, 2005; Duru, 1995). Environmental movement became a broad church that includes many different positions and organizations. Preventing local and national ecologically detrimental energy or development projects became a priority after the 2000s. Environmental movements in Turkey are challenging the developmentalist ideology deeply rooted in society and pointing out sustainable policies and practices. They sustain awareness raising campaigns, lobby decision makers, bring lawsuits, and engage in protest activities. Major environmental campaigns are the ones against

gold-mining in Bergama (Çoban,2004) and in Cerattepe, Artvin (Pehlevan&Şakacı, 2018) against coal plants in Gerze (Akbulut, 2014) and in Aliağa, İzmir (Turhan et al., 2019), dam construction in Hasankeyf (Kadirbeyoğlu, 2018), nuclear power plant in Akkuyu (Şahin&Ün, 2021), gas power plant in Ordu (Knudsen, 2015), hydro-electric power plants in Black Sea region (Aksu et al, 2016; Hamsici, 2011) third bridge on Bosphorus, İstanbul (Paker, 2018). Climate movement (Baykan, 2019) grew in the 2000s and the Gezi uprising in 2013 was a reaction to urban policies and grievances against the government (Uncu, 2016; Erensü & Kahraman, 2017).

2. Framing Environmental Movements between Local and Global

Buttel argues that considering the environmental conflicts and their resolutions on a global scale emerged as the most compelling transformation regarding environmental thinking in the late twentieth century (Buttel, 2003). However, the majority of the environmental activities occur at local scope (Rootes, 1999). Since local and global grievances and claims are increasingly interrelated, the bloc against GMOs in Turkey developed pursuits and precedents at various scales. Alliance activists designate a blueprint that links GMOs with issues salient to Turkish politics but also capture a broader global frame. Thus, the crucial question is not the interpretative novelty, but the manner in which local, national and global grievances are articulated. This study focusing on the Monster Tomato Tour as a case study aims to analyze the construction of a multilayered framing process. This includes decomposing the core tasks of the framing process, namely, as diagnostic, prognostic, motivational frames and exploring how and why these relate to local, national and global scales. I argue that the Turkish anti-GM movement bridged a vast political space by framing the GM issue in a multilayered way by interpreting the grievances and claims locally, nationally and globally.

Social movement scholars' interest in framing processes begin by taking as problematic what until the mid-1980s the literature largely ignored: meaning work – the struggle over the production of mobilizing and counter mobilizing ideas and meanings (Benford&Snow, 2000, p.613). From the perspective of frame analysis, social movements are not viewed merely as carriers of extant ideas and meanings that grow automatically out of structural arrangements, unanticipated events, or existing ideologies. They are actively involved in production of meaning for constituents, antagonists, and bystanders or observers' (Snow&Benford, 1988). The source of inspiration was Erving Goffman who introduced the aim of frame analysis as "to isolate some of the basics frameworks of understanding available in our society for making sense out of events and to analyze the special vulnerabilities to which these frames of reference are subject" (Goffman, 1974,p.10). Collective action frames are constructed in part as movement adherents negotiate a shared understanding of some problematic condition or situation they define as in need of change, make attributions regarding who or what is to blame, articulate an alternative set of arrangements, and urge others to act in concert to affect change (Benford&Snow, 2000, p.615).

The importance of framing strategies has been widely explored within the social movement literature. While there are studies on adjusting framing strategies between local and global

contexts, most of them focused on how local actors draw upon universal claims and frame issues in the local context (Hilson, 2009; Reilly, 2007). Substantially less work has investigated the multilayered framing of grievances, strategies and calls for action.

In Italy, della Porta and Piazza studied the mobilizations against the High-Speed Train project. Activists formulated the local contention as the premier "no-global" contention and they interchangeably mobilized local and global rhetoric to bypass NIMBY allegations (della Porta&Piazza, 2008). Regarding the anti-GM mobilizations around the world, framing theory sheds light on the ways that grievances experienced in diverse institutional and cultural settings. Purdue argues that in engaging a wider range of civil society in the GM debate, the movement emphasized health and consumer issues over patenting, biodiversity and global justice frames (Purdue, 2000). On the other hand**,** the French anti-GM movement proved to be efficient in linking global justice frames with local perspectives. Williams claims that French activists' understanding of cosmopolitanism does not transcend the local (Williams, 2008). The GM debate was initially framed as a risk issue but then evolved into 'food quality' question and the dispute turned into peasants' know-how, that related topics of nutritional traits with agricultural productivism, cultural homogenization, internationalization (Heller, 2002).

Andrée outlines the two high profile biotechnology failures (rejection of recombinant bovine growth hormone in 1999 and herbicide tolerant Roundup Ready wheat in 2004) in Canada where the government is recognized as a key proponent of GM in agriculture (Andrée, 2011). Argentina was one of the earlier adopters of GM technology in agriculture and GM soy has enjoyed success since its approval in 1996 (Arancibia, 2013). However, it was not unproblematic. Leguizamón demonstrates that GM soy operates as a tool of power to obtain consent, to legitimate injustice, and to suppress potential mobilization (Leguizamón, 2020). Goldfarb & van der Haar argue that the GM soy boom negatively affected peasants in vulnerable tenure situations in the Northern provinces (Goldfarb&van der Haar, 2016).

Klepek argues that grassroots organizations in Guatemala frame GMOs as a threat to global diversity and draw support from international NGOs (Klepek, 2012). Tucker analyzing the anti-GM resistance in New Zealand revealed that core movement activists identified four movement-specific collective action frames on genetic engineering (Tucker, 2013). These were GE encompasses a multitude of issues, GE is risky, GE is unnatural and GE is all about the ownership of life. Fitting emphasized the cultural significance of the crop in Mexico and pointed out the demands of peasants and consumers of participating in decision making of GM policies (Fitting, 2011). Levidow and Boschert pointed out that the stakes for segregating non-GM crops were framed differently by opponents and proponents in the European Union (Levidow&Boschert, 2011).

Political and economic processes in which the GMOs are embedded invite an exploration of different scales. The scale(s) at which a social problem is generated may not coincide with the scale(s) at which the problem might be resolved via public policy (William, 1999, p.56). From a

disjuncture between the geographic scale(s) at which a problem is experienced, and the scale at which it can politically be addressed, arises the need to build linkages between grievance events at one scale and possibilities for recourse at another (Towers, 2000, p.23). Miller studied the Nuclear Freeze mobilization and revealed that the movement framed the problem around the menace of a nuclear combat on a global scale but disregarding the local scale of Cambridge's economy cost the movement a local referendum failure in Cambridge, MA (Miller, 1997).

The core hypothesis of this paper is that the anti-GM movement in Turkey developed collective action frames in a multilayered approach by interpreting the grievances and claims locally, nationally, and globally. This hypothesis presumes that there is a complex interaction between local, national global scales in terms of defining the social problems, offering adequate solutions, and providing motivations for action. The remainder of the paper argues that the movement is more likely to develop a) diagnostic frames, that is, to identify a problem and attribute blame at the *global scale,* b) prognostic frames, namely, to offer solutions, strategies, and tactics at the *national scale and c)* motivational frames as a rationale for action mainly at the local scale.

3. Methodology

Social movement scholars apply both quantitative and qualitative methods. Qualitative methods "focus on meanings and motivations that underlie cultural symbols, personal experiences, phenomena and detailed understanding of processes in the social world" (Aspers&Corte, 2019, p.146). Interviews are widely used to collect data and practiced by scholars who give more importance to people's interpretations of reality (della Porta, 2014). For our study, it is important to reflect on how activists construct meaning over their struggles, interpret the political environment and then act accordingly. As Johnston argues, framing perspective restated an appeal in cultural and ideational processes (Johnston, 1995). In order to obtain specific information on framing strategies but also cover the ways in which anti-GMO activists' culture relates to the wider world, interviews proved to be heuristic.

Between 2007 and 2009, I conducted 36 semi – structured interviews to collect data. At the national level with the founders of the No to GMOs Platform, leaders of national organizations – environmental, farmers and consumer – and scientific communities were the interviewees. I have interviewed key local campaigners and activists involved in local ad hoc anti-GM networks in 12 cities during the Tour (İstanbul, Ankara, İzmit, Bursa, İzmir, Denizli, Muğla, Adana, Tarsus, İskenderun, Samsun, Trabzon). Interviews were tape-recorded, transcribed and a narrative analysis carried out. This helped to figure out how activists construct story and narrative and how it relates to their experience within the movement.

In terms of interview themes, there were three sets of questions. The first one focused on the awareness, concerns, and personal views of activists on the GM issue, the role of the activists' groups within the anti-GM movement, and their campaigning experiences. Questions aimed at overviewing the construction of a brief background of each group and the understanding how

and why the activists have been involved in the movement. By asking activists why they find the GM issue problematic, I aimed at asserting the diagnostic framing, covering the description of an issue and the assignment of accusation and causation.

The second set centered on the Monster Tomato Tour in order to raise the issue of prognostic framing, i.e., the catalog of main blueprints, maneuvers and objectives within the emergence of the movement. By going through the campaigning activities of the Tour, I focused on the references raised by the activists in designing the target and proposing solutions to the GM issue. This allowed me to seize the ways in which they frame the GM issue in relation to local, national, and global scales. Concerning the motivational framing, I tried to assess how the activists develop motivations for the citizens to act. The last group turns to transnational mobilization. Activists are asked to what extent they were informed on the opposition to GMOs beyond Turkey, and their relations with transnational networks. In addition to interviews, comprehensive auxiliary sources and campaign sources were evaluated.

Declarations of the No to GMOs Platform, public statements, bulletins were explored. The State's five-year development plans, laws and draft laws, official gazettes, regulations, and parliamentary questions were reviewed. The accounts of the preparations of the Monster Tomato Tour exchanged in the Platform's Yahoo Groups accounts (First one whose membership was open to the public and the second one was exclusive to the core activists of the No to GMOs Platform, with the permission of the group administrators I was accepted as a member) were also scrutinized. E-mail exchanges between activists provided rich data for observing the problematization of the issue, designing the strategy and tactics and consultations between national organizers and local campaigners.

4. Diagnostic Framing at the Global Scale

The function of diagnostic framing involves 'blame for some problematic condition by identifying blameworthy agents, be they individuals or collective processes or structures' (Snow and Benford, 1992, p.137). The answers to the questions such as "What is represented as a problem? Who is seen to have made this a problem?" are crucial for diagnostic framing. Klandermans and de Weerd seek to comprehend the reason why farmers in Spain and Netherlands target their governing bodies even though the EU is predominantly accountable regarding the farming policies (Klandermans&de Weerd, 1999). Farmers of these countries presume that the EU is accountable however they aim their protests against national authorities. According to a study based on anti-GM protest data between 1995 and 1997, there has been a shift in focus of protest in general toward the EU (Kettnaker, 2001).

In this part, I develop the argument that the Turkish anti-GM movement refers to the global level to develop diagnostic frames regarding the GMOs. It is similar to the findings of Scoones who underlines that global connections have been a key feature in the anti-GM mobilizations in certain developing countries such as Brazil, India, and South Africa and drives at national realm

were reproduced within international controversies on anti-globalization, biological diversity, and rights of farmers (Scoones, 2008).

Transnational economic and political actors are held responsible for the introduction of GMOs. These are mainly multinational biotechnology companies (Monsanto, Cargill, Bayer, Syngenta, Dupont), international institutions (FAO, WTO) and top GM grower countries (USA, Canada, Argentina). The very first phrase of the No to GMOs Platform's Declaration reveals the blameworthy agent: "A ghost threatening our dining tables, our health and our future has been around for a long time now. The name of this threat caused by multinational companies and greedy investors is: Genetically Modified Organisms, shortly GMOs." (No to GMOs Platform, 2004). Both national and local activists are at pains to relate the GM issue to global issues and global actors.

> *"International agro-biotechnology corporations are expecting 200 billion dollars turnover from the seed market. Neither GM seeds nor GM plants are ever needed. By using this propaganda, they made the leading authority in the world – the FAO – and many governments believe that there is a need for GMOs. They got the support of the American government because the lobby was so strong. That's why certain experts of American official institutions –EPA and FDA – are employed in Monsanto's companies."* (Interviewee – 23)

The movement represents a broad coalition of environmental and health concerns, agriculture issues and consumer rights. Before joining the anti-GM network, environmental and consumer groups had campaigned against toxic waste, against the use of pesticides and hormones in agriculture or in defense of small-scale agriculture in the 1990s. Another strand articulated with the anti-GM network is the organic agriculture movement which has been struggling for the sustainability of rural communities. The introduction of GMOs, assumes farmers' union activists, would create a form of corporate domination over seeds. He refers to GM seed as "terminator" and "infertile" and acknowledges:

> *It is essential for a farmer to produce his own seed to maintain its profession and to avoid alienation to farming. We are against the GMOs because they are depriving us from our independence, even taking away our profession* (I-7).

The activists tried to make sense of the transnational economy and politics of the GM issue and their potential impacts on the national and local struggle. The GM issue is closely tied with biotechnology, agriculture, health, environmental regulation, and international trade. An agricultural engineer from the Platform puts it in that way.

> *My main concern is the loss of biodiversity. GMOs are the biggest threat to genetic diversity. They destroy the traditional peasant farming that we are trying to preserve and keep sustainable. There are these big corporations that we call multinational or transnational corporations. I describe the GMOs as a form of invasion by corporations, their hegemony*

> *over the peasants. This is the last form of invasion of global capitalism or global capital and that's why this is the most dangerous and important part. (I-13)*

Activists had to acquaint themselves with reliable information and interpret them in line with national and local strategies. As Smith argues, globalization is intensifying the relevance of distant governing aspects toward local players (Smith, 2004, p.314). For instance, I-23 in Bursa province has to rely on accurate information about Cargill regarding its global GM business activity, needs to know how people in other localities protest against this agribusiness giant, or a national activist would like to have access to the GMO regulation of the EU to put pressure on Turkish government which plans to become a member.

What I observe on information processing is that the activists of the Platform have various kinds of information on scientific studies, transnational regulations, and protest activities through transnational environmental organizations for instance Greenpeace Europe and FoE Europe), anti-GM networks that also include farmers and consumers, and, to a lesser extent, alternative environmental media services. Greenpeace's transnational network is an important source and Turkish toxics campaigner filtered the GM-related news and activities from Greenpeace resources and brought them to the attention of national activists through the exchanges of emails in a Yahoo Group.

Benford and Snow pointed out the position and recognized competence of the people and groups who construct the frames (Benford&Snow, 2000, p.621). Their organizational affiliations are also important. Frames and demands will resonate more if supporters and base groups attach importance to the positions and organizations of frame articulators. Mobilizing epistemic communities may result in favor of social movements against GMOs (Kinchy, 2010). Scientists, medical doctors and leading anti-GM activists issued popular publications on biotechnology and food issues after the first wave of the mobilization. (Topal: 2007; Bayram: 2008; Demirkol, 2010; Ekoloji Kolektifi and ZMO: 2010; Özer: 2010). These publications compiled the scientific, political, and juridical discussions on the GM issue and helped the vulgarization of biotechnology emphasizing mainly its risks and consequences. Expertise of these circles echoed with the demands of mainstream media and citizens' concerns on GM crops and foods. Aksoy scrutinized the online archives of four mainstream Turkish newspapers between 2004 and 2010 and revealed that control, risk, and policy conflict frames were used in the majority of the news items regarding the GM debate (Aksoy, 2012).

5. Prognostic Framing at the National Scale

In this section I will try to illustrate how the Turkish anti-GM mobilization outlined a program to redress problematic conditions, including targets, strategies, and tactics at the national level. Prognostic framing suggests solutions to problems, including how to achieve the solutions, i.e., the identification of general strategies, tactics, and targets. Focal point is in what ways the

reality can be changed and what needs to be done in order to change the reality (Benford, 1993). Questions for a prognostic frame can be: "What are the suitable courses of action suggested? How to achieve goals in terms of strategy and instruments?" The anti-GMO activists allocated most of their effort and time to define the legal procedures, define adversaries and consequently develop a common strategy.

In 1988, the State Planning Organization (now defunct) described biotechnology and outlined an institutional scheme prioritizing a set of fields for R&D (Özdamar, 2009, p.82). The 8th Five Year Development Plan (2001-2005) identifies biotechnology-genetic engineering as one of the pillars of the information economy and society and anticipates the establishment of the High Council of Biotechnology. The Ninth Plan covering 2007-2013 also puts emphasis on biotechnology as a priority for increase in productivity and competitiveness in a globalized world. In contrast with the previous Development Plan, it draws attention to the need for establishing standards about the use and movement of GMOs. As Turkey is not a GM crop producer, legislative works mainly focused on the importation of GM crops and evaluation of related risks (Erbaş, 2008, p.22).

The legislative work on GM plants started in 1998 by the Ministry of Agriculture and Rural Affairs (MARA). The Instruction on Field Trials of Transgenic Plants entered in force concurrently. Firms required the assessment of safety evaluation and open field trials have been conducted by regional agricultural research institutes. Although there has been no legal GM agricultural product on the market, the Chamber of Agricultural Engineers alleged that twenty million tons of GM maize, soy, colza, and cotton have been illegally smuggled between 1998 and 2008 (Koçer, 2009). In 2004 Turkish Consumer Association representatives took samples of corn and soya from supermarkets in Ankara. The results revealed that corn flour, soya mincemeat and chicken feed contained GMOs (Aslan&Şengelen, 2010).

Given the absence of a Biosecurity Law, the main strategy of the movement is to obtain a rigorous regulatory regime for GMOs. The internal discussions pointed out a deliberation on *how* and *why* to choose a specific Ministry as a target while the Platform activists were preparing drafts of questions to be submitted to the Parliament by MPs sympathetic towards the movement.

> *The MARA is dealing with the legal regulations concerning the GMOs, that's why our interlocutor is the Ministry of Agriculture. We should also be directing the petition towards the Ministry of Health as we are considering that the GM issue concerns public health as well. We can define it as the related Ministries, the Ministry of Agriculture and Health in the first instance. (I-3)*

Turkey has been a signatory to the Convention on Biological Diversity since 1997 and became a party to the Biosafety Protocol in 2004. However, Turkey did not legislate a Biosafety Bill prior to 2010. The movement proved to be successful in placing the GM regulation toward the national political agenda and accelerated the legislative process of the Biosecurity Law, in abeyance since 1996. Dividing the process of creating new laws containing collective benefits into agenda setting,

legislative content and implementation of legislation simplifies the analysis and also makes it easier to judge the impact of a challenger (Kingdon, 1984; Amenta et. al, 1999). The mobilization targeted the Government and the MARA, national competent authority on GMOs. Claims are formulated within the national sphere: Entrance of GMOs into Turkey should be stopped; imported GM food should be labeled and the National Biosecurity Law should be implemented without delay. Primary targets of the protest activities were Turkish Grand National Assembly, MARA – Forestry and Rural Affairs Committee and Health Committee of the Assembly and General Directorate of Agricultural Research operating under the MARA.

On 27 October 2004, the Monster Tomato Tour ended in the capital, Ankara, deliberately chosen to alert the national authorities. The activists made a press conference in front of the Parliament and addressed the government, and the MARA. 100.000 signatures collected via the petition from 12 cities were handed to the Head of the Petition Commission of the National Parliament. Ironically the Minister of Agriculture visited the stand and said he was supporting a tight control on GMOs. In December 2004, the Platform requested an appointment from the Parliamentary Agricultural Commission, and a delegation of activists had an interview with the head of the Commission. Two main demands were the Platform's participation in the Biosecurity Commission before the Draft Law comes to the General Assembly and consideration of the Platform's concerns. They agreed on the participation of the Platform in both the Agricultural and Biosecurity Commissions. Activists seized the national level as a scale of regulation and therefore, they have intensified the prognostic framing process at national level where the GM issue could be resolved.

6. Motivational Framing at the Local Scale

An important function of the framing process is that of producing motivations to act, i.e. giving people a reason to join the protest by convincing them that collective action is not only possible but also potentially successful (Snow and Benford, 1988). From this point forward, I demonstrate that mobilization develops motivational frames that serve as a justification to engage in action mainly at the local level. Activists conceived the local level as a scale of meaning and refer to it to construct motivational frames. Schurman and Munro argued that although the African anti-GM activists drew on transnational discourses, local actors interpreted the GM technology with reference to distinct territorial biodiversity and local trade. (Schurman and Munro, 2010, p.149). Whilst referring to national and global grievances for constructing diagnostic and prognostic frames, the Turkish anti-GM movement developed rationales for action in localities.

Local campaigners mobilized past or ongoing environmental and agricultural issues as a representation of potential threats that can be linked to GMOs. Gillan et.al. examining the activism against war in the UK conceded that there was not a single operational frame (Gillan et.al, 2008). Rather numerous frames guided activists to construct a meaning. By the same token, there is no single local motivational frame that strengthens the call for action. In İzmir, the local agricultural

farmers' union emphasized the allegedly illegal GM plantations in the Aegean Region; in Tarsus environmental lawyers highlighted the agricultural pollution as a result of industrial farming and considered the introduction of GMOs as an extension of pollution in Çukurova Region. In Samsun, activists called for action against the threat of GM crops to local agricultural biodiversity especially for local corn varieties. In Izmit, activists warned citizens by alleging that GM crops had been transferred unlawfully by means of the city's harbor. The excerpt below from the FoE's Report on Monster Tomato Tour produced by two GM campaigners who had accompanied the Monster Tour during the first ten days illustrates how they try to develop a tangible link with the GM issue.

In Honaz (Denizli), nature delivers enough and that there is no need for GMOs. On the contrary, GMOs pose a serious threat to exportation possibilities. We explained to the mayor that 70% of consumers in the EU do not want to eat GMOs (Friends of the Earth, 2004). Activists in Trabzon referred to the negative effects of the Chernobyl nuclear accident in 1986, still alive in memories of the people in the Black Sea Region. Activists in Diyarbakır emphasized the importance of the region as one of the places where "Einkorn" wheat seed is domesticated. In Muğla, the Environmental Improvement Association was opposing the damaging effects of tourism, be they unplanned urbanization or loss of agricultural lands. The EIA is articulated with the anti-GM mobilization through the regular meetings of Mediterranean Region Environmental Platform and its chairman joined the group of environmentalists who visited Brussels and met FoE representatives. In Tarsus, a local NGO had previously been campaigning on the use of hormones in agriculture, agricultural pollution and pesticides. The local organizations did not have much expertise on GMOs, therefore to a large extent they relied on the framing strategies of national organizations. Consequently local networks replicated the prognostic and diagnostic frames generated by the core activists, but they were keener to develop motivational frames in line with the social and cultural structure of their locality.

One notable local exception was Bursa. The presence of Cargill offered an opportunity to widen the scope of their frame and exploit the linkages of the involvement of translocal actors. Cargill's facility was established on land zoned 'agricultural' without a building permit, and local organizations were leading a legal struggle against the company. When the facility began to produce starch-based sugar, activists claimed that Cargill was using GM maize imported from the US. Moreover, the Monsanto-Cargill joint venture made the company an easy target for anti-GMO activists.

Biosecurity Law entered into force in 2010. An independent Biosecurity Council was appointed to assess GM applications. In 2011, the Federation of the Food and Beverages Associations submitted applications for soybean, corn, canola, and potato events for food use. Although the No to GMO Platform lost its ability to organize collective action, two main organizations in the Platform sustained mobilization against the introduction of GMOs. Greenpeace launched a petition campaign against GM application of diverse varieties (TÜSEV, 2013) and the Chamber of Agricultural Engineers directed 15 thousand citizens' review to the Biosecurity Council's evaluation mechanism. Public reaction forced the food industry to withdraw their applications,

but the industry kept actively lobbying for a categorical ban on food and feed imports (Yağcı, 2018). Since then, no GM applications have been approved for food use or cultivation. It is a hard-won victory for the Turkish anti-GM movement. On the other hand, it is harder for the movement to attain leverage by emphasizing the concerns over GM feed. The feed industry mainly Turkish Poultry Meat Procedures and Breeders Association and Feed Manufacturers Association introduced numerous GM applications for feed use to the Council. The Biosecurity Council held 39 meetings between 2010 and 2018 and 36 GM applications (10 soybean and 26 corn) approved for feed use (TBBDM, 2021; MoAF, 2021). The Council was abolished by a decree-law in 2018 and its mandate has been transferred to the Ministry of Agriculture and Forestry. The anti-GM movement is now in an abeyance period after a protest cycle between 2004 and 2012.

7. Conclusion

As local, national, and global environmental grievances are increasingly interrelated, environmental movements' framing of the geographical and political scales needs a detailed analysis. Most of the studies on adjusting framing strategies between local and global contexts are focused on how local actors draw upon universalizing claims and frame issues in the local context accordingly. Another strand of research argues that movements strategically shift local, national and global scales as they try to link global processes and local contexts.

Less research attention is given to the framing of grievances, strategies and calls for action regarding different scales. This paper argues that the Turkish anti-GM movement is more likely to develop a) diagnostic frames, that is, to identify a problem and attribute blame at the *global scale.* b) prognostic frames, namely, to offer solutions, strategies, and tactics at the *national scale and c)* motivational frames as a rationale for action mainly at the local scale.

Political and economic processes within which the GMOs are produced, traded and regulated invite an exploration of different scales. Firstly, activists tried to make sense of transnational dimensions of the political economy of the GMos and determine the potential impacts of transnational developments on national and local struggle. Transnational actors are held responsible for the introduction of GMOs. These were mainly multinational biotechnology companies (Monsanto, Cargill, Bayer, Syngenta, Dupont), international institutions (FAO, WTO) and GM producing countries (United States of America, Canada, Argentina). The movement was more likely to develop diagnostic frames, that is, to identify problems and attribute blame at the global scale. The nation-wide Tour was a part of a transnational campaign that emerged from the dispute between the USA and the EU also helped address the root causes of the problem on a global scale. As Turkey is not a GM crop producer, diagnostic framing mainly focused on foreign producer countries, biotech companies and international regulations.

Secondly, the movement was more likely to develop prognostic frames at the national level. Activists outlined a program for redress of problematic conditions, including targets and strategies and the change is sought at institutional level. The mobilization regularly targeted the

Government and the MARA, the national competent authority in order to obtain a more rigorous regulatory regime. Given the fact that Turkey is a country where the political and administrative system is highly centralized and there is no room for local administrative authorities, the strategic choice of constructing a prognostic frame at national scale is quite reasonable. Main demands of the Platform such as 'Entrance of GMOs into Turkey should be halted; imported GM food should be labeled and the National Biosecurity Law should be implemented without delay' are also formulated within the national sphere. The movement proved to be successful in placing the GM debate on the national political agenda and accelerated the legislative process of the Biosecurity Law. Movements were not the only actors investing in meaning construction. Corporations, development agencies, research scientists, agrarian elites and policy makers undertake certain framing strategies with the aim of building consensus in favor of biotechnology (Motta:2015; Schnurr,2013). Some countries initiated public engagement mechanisms on GM debate. The UK organized a governmentally sponsored debate "GM Nation" on the commercialization of GM crops (Attar&Genus, 2014). Government formation can also be decisive for the outcome. Tosun interprets the prohibition of the commercial cultivation of GM crops in some Central and Eastern European member states as a result of public and political contestation and shows that the presence of a Christian Democratic or Agrarian Party in government increases the likelihood of the cultivation ban (Tosun, 2014).

Lastly, the movement developed motivational framing mainly at the local level although GM issue is hardly a local phenomenon in Turkey. Local activists either relate an ongoing or past environmental or agricultural problem to the GM issue or emphasize the potential risks of GMOs regarding the local environmental or agricultural structures. Activists conceive the local level as a scale of meaning and a territorial framework for cultural legitimacy and widely refer to it to construct motivational framing. A wide range of local motivational frames from pesticides to loss of agricultural biodiversity, from agricultural pollution to nuclear accidents has been used during the Tour. Local networks replicated the prognostic and diagnostic frames generated by national activists, but they were keen to develop motivational frames in line with the social and cultural structure of their locality. Issues beyond material gains or potential health risks were also at stake in other developing country's mobilization contexts. Lapegna shows that the struggle of Argentinian peasants was not only about material demands but also about identity, recognition and emotions (Lapegna, 2016). Peschard argued that the National Campaign for a GM-Free Brazil expanded the narrow debate of transgenic crops on health and environmental risks to include broader environmental and social justice issues (Peschard, 2012).

References

8th Five Year Development Plan 2001-2005 (2000) Retrieved from: https://www.sbb.gov.tr/wp-content/uploads/2018/11/Sekizinci-Be%C5%9F-Y%C4%B1ll%C4%B1k-Kalk%C4%B1nma-Plan%C4%B1-2001-2005.pdf

9th Development Plan 2007-2011 (2006) Retrieved from: https://www.sbb.gov.tr/wp-content/uploads/2018/11/Dokuzuncu-Kalk%C4%B1nma-Plan%C4%B1-2007-2013%E2%80%8B.pdf

Adem, Ç. (2005) "Non-state Actors and Environmentalism" in Adaman, F., and Arsel, M. (Ed.) *Environmentalism in Turkey: Between Democracy and Development?*, Hants, UK: Ashgate, 71-86.

Akbulut, B. (2014) "Neither Poor Nor Rich But "Malcontent": An Anatomy of Contemporary Environmentalisms", *Marmara Üniversitesi Sosyal Bilimler Dergisi*, 2:1, 9-24. doi: 10.14782/SBD.201416298

Aksoy, S. (2012) "Genetiği Değiştirilmiş Organizmalara İlişkin Tartışmaların Türk Basınında Çerçevelenmesi", *Selçuk İletişim,*7-3, 191-205.

Aksu, C., Erensü,S. &Evren, E. (2016) *Sudan Sebepler: Türkiye'de Neoliberal Su-Enerji Politikaları ve Direnişler*, İstanbul: İletişim Yayınları.

Amenta, E., Halfmann, D., & Young, M. (1999) "The Strategies and Contexts of Social Protest: Political Mediation and the Impact of the Townsend Movement", *Mobilization*, 4:1, 1-23. doi: 10.17813/maiq.4.1.y66180053qg16252.

Andrée, P. (2011) "Civil Society and the Political Economy of GMO Failures in Canada: A Neo-Gramscian Analysis." *Environmental Politics*, 20:2, 173–191. doi: 10.1080/09644.016.2011.551023.

Ansell, C., Maxwell, R., & Sicurelli, D. (2006) " Protesting Food: NGOs and Political Mobilization in Europe," in Ansell C.and Vogel D., (Ed.) *What's the Beef? The Contested Governance of European Food Safety.* Cambridge, MA: MIT Press. 97-123.

Arancibia, F. (2013) "Challenging the Bioeconomy: The Dynamics of Collective Action in Argentina." *Technology in Society*, 35:2, 79–92. doi: 10.1016/j.techsoc.2013.01.008.

Aslan D., Şengelen M, (2010) *Farklı boyutlarıyla Genetiği Değiştirilmiş Organizmalar*, Ankara: Ankara Tabip Odası.

Aspers, P., Corte, U. (2019) "What is Qualitative in Qualitative Research?", *Qualitative Sociology* 42:2, 139–160. doi: 10.1007/s11133.019.9413-7.

Attar, A., Genus, A. (2014) Framing public engagement: A critical discourse analysis of GM Nation? *Technological Forecasting and Social Change*, 88, 241–250. doi: 10.1016/j.techfore.2014.07.005.

Baykan, B.G. (2019) "What did the Turkish climate movement learn from a global policy failure? Frame shift after the Copenhagen Climate Summit", *Turkish Studies,* 20:4, 637-655. doi: 10.1080/14683.849.2019.1601563

Bayram, M. (2008) *Ambalajlar, Silahlar, Açlar*. İstanbul:Hayy Kitap.

Benford R.D., Snow D.A. (2000) "Framing Processes and Social Movements: An Overview and Assessment", *Annual Review of Sociology*, 26, 611-639. doi: 10.1146/annurev.soc.26.1.611.

Biosafety Bill (2010) Retrieved from https://www.mevzuat.gov.tr/MevzuatMetin/1.5.5977.pdf

Buttel, F.H. (2003) "Environmental sociology and the explanation of environmental reform", *Organization & Environment,* 16:3, 306-344. doi: 10.1177/108.602.6603256279.

Çoban, A. (2004) "Community-based Ecological Resistance: The Bergama Movement in Turkey", *Environmental Politics,* 13:2, 438-60. doi: 10.1080/096.440.1042000209658.

della Porta D., Piazza, G. (2008) "Local Contention Global Framing", in Rootes C. (Ed.) *Acting Locally, Local Environmental Mobilizations and Campaigns*, London, Routledge. 144–165.

della Porta D. (2014) "In-depth Interviews" in della Porta, D. (Ed.) *Methodological Practices in Social Movement Research*, London: Oxford University Press, 228-261.

Demirkol, K. (2010) GDO: *Cağdaş Esaret*, İstanbul: Kaynak Yayınları.

Doherty, B., Hayes, G. (2012) "Tactics, Traditions, and Opportunities: British and French Crop Trashing Actions in Comparative Perspective", *European Journal of Political Research*, 51:4, 540-562. doi: 10.1111/j.1475-6765.2011.02048.x.

Doherty, B., Hayes, G. (2014) "Having Your Day in Court: Judicial Opportunity and Tactical Choice in Anti-GMO Campaigns in France and the United Kingdom", *Comparative Political Studies,* 47:1, 3–29. doi: 10.1177/001.041.4012439184.

Duru, B. (1995) *Çevre Bilincinin Gelişim Sürecinde Türkiye'de Gönüllü Çevre Kuruluşları*, (Unpublished Master's Thesis) Ankara Üniversitesi, Ankara, Turkey.

Ekoloji Kolektifi, TMMOB Ziraat Mühendisleri Odası (2010) *Görünmez Elin Ekolojisi,* Ankara.

Erbaş, H. (2008) *Türkiye'de Biyoteknoloji ve Toplumsal Kesimler: Profesyoneller, Kentsel Tüketiciler ve Köylüler*, Ankara Üniversitesi Biyoteknoloji Enstitüsü Yayınları No: 4.

Erensü, S., Kahraman, O. (2017) "The Work of a Few Trees: Gezi, Politics and Space", *International Journal of Urban and Regional Research*, 41:1, 19-36. doi: 10.1111/1468-2427.12387.

Fitting E.M. (2011) *The Struggle for maize: Campesinos, workers, and transgenic corn in the countryside.* Durham, NC, Duke University Press.

Friends of the Earth Europe (2004) *Bite Back: WTO hands off our food! Monster Tomato Tour 2003-2004. [Brochure].* Brussels: Belgium.

Gaskell, G., Bauer, Martin W. (2001) "Biotechnology in the years of controversy: a social scientific perspective", in: Gaskell, George and Bauer, M. W., (Eds.) *Biotechnology 1996-1999: The Years of Controversy*. London: Science Museum Press. 3-14

Gillan, K., Pickerill, J., & Webster, F. (2008) Anti-*War Activism: New Media and Protest in the Information Age*, Basingstoke: Palgrave Macmillan.

Goldfarb, L., van der Haar. G. (2016) "The Moving Frontiers of Genetically Modified Soy Production: Shifts in Land Control in the Argentinian Chaco", *Journal of Peasant Studies,* 43:2, 562–582. doi: 10.1080/03066.150.2015.1041107.

Goffman, E. (1974) *Frame Analysis: An essay on the organization of experience*. Cambridge:Harvard University Press.

Hamsici, M. (2011) *Dereler ve İsyanlar*, Ankara:Nota Bene Yayın Yayınları.

Heller, C. (2002) "From Scientific risk to paysan savoir-faire: Peasant expertise in the French and Global Debate over GMOs", *Science as Culture*, 11:1, 5-37. doi: 10.1080/095.054.30120115707.

Hilson, C. (2009) "Framing the Local and the Global in the Anti-Nuclear Movement: Law and the Politics of Place", *Journal of Law and Society*, 36:1, 94-109. Doi: 10.1111/j.1467-6478.2009.00458.x.

ISAAA (2018) Global *Status of Commercialized Biotech/GM Crops in 2018* (ISAAA Brief 54).

Johnston, H. (1995) "A methodology for frame analysis: from discourse to cognitive schemata" in Johnston, H., Klandermans, B. (Eds.), *Social Movements and Culture*. Minneapolis: University of Minnesota Press. 217-246.

Kadirbeyoğlu, Z. (2018) "Waterproof development?: Impact of advocacy networks on anti-dam movements in India and Turkey" in Jassal,T. S. & Turan, H. (Eds.) *New Perspectives on India and Turkey*, London:Routledge. 182-194.

Kettnaker, V. (2001) "The European Conflict over Genetically-Engineered Crops" in Imig D., Tarrow, S. (Eds) *Contentious Europeans,* Lanham: Rowman and Littlefield. 205-232

Kinchy, A. (2010) "Epistemic Boomerang Expert Policy Advice As Leverage in the Campaign Against Transgenic Maize in Mexico", *Mobilization: An International Quarterly*, 15:2, 179–198. doi: 10.17813/maiq.15.2.a568g55h0k663k30.

Kingdon, J.W. *(1984) Agendas, Alternatives and Public Policies,* New York: Longman.

Klandermans, P. G., de Weerd, M. (1999) "Injustice and adversarial frames in a supranational political context: Farmers protest in the Netherlands and Spain" in D. della Porta, H. Kriesi, & D. Rucht (Eds.), *Social Movements in a Globalizing World.* Basingstoke: MacMillan.134-147.

Klepek, J. (2012) "Against the Grain: Knowledge Alliances and Resistance to Agricultural Biotechnology in Guatemala" *Canadian Journal of Development Studies,* 33:3, 310–325. doi: 10.1080/02255.189.2012.719824.

Knudsen, S. (2015) "Protests Against Energy Projects in Turkey: Environmental Activism Above Politics?," *British Journal of Middle Eastern Studies,* 43:3, 302–323. doi: 10.1080/13530.194.2015.1102707.

Koçer, Y. (2009, November 25) 20 milyon ton GDO'lu ürün tüketmişiz. *Posta* Retrieved from

https://www.posta.com.tr/20-milyon-ton-gdolu-urun-tuketmisiz-9097

Krom, M.P., J. Dessein, & N. Erbout (2014) "Understanding relations between science, politics, and the public: the case of a GM field trial controversy in Belgium"" *Sociologia Ruralis,* 54:2, 21– 39. doi: 10.1111/soru.12031.

Lapegna, P. (2016) Soybeans *and Power: Genetically Modified Crops, Environmental Politics and Social Movement in Argentina*. New York: Oxford University Press. doi :10.1093/acprof: oso/978.019.0215132.001.0001.

Levidow, L., Boschert, K. (2011) "Segregating GM crops: why a contentious 'risk' issue in Europe?" *Science as Culture,* 20:2, 255– 279. doi: 10.1080/09505.431.2011.563570.

Leguizamón, A. (2020) Seeds *of Power: Environmental Injustice and Genetically Modified Soybeans in Argentina*. Durham, NC: Duke University Press.

McAdam, D., Tarrow,S., & Tilly, C. (2001) *Dynamics of Contention*. Cambridge: Cambridge University Press.

Miller, B. (1997) "Political action and the geography of defense investment: Geographical scale and the representation of the Massachusetts Miracle", *Political Geography*, 16:2,171–85. doi: 10.1016/S0962-6298(96)00049-2.

Ministry of Agriculture and Forestry (2021) GM Feed, Retrieved from https://www.tarimorman.gov.tr/Konular/Gida-Ve-Yem-Hizmetleri/Yem-Hizmetleri/GDOlu-Yemler Erişim Tarihi 02/04/2021.

Motta, R. (2015) "Transnational Discursive Opportunities and Social Movement Risk Frames Opposing GMOs", *Social Movement Studies,* 14:5, 576-595. doi: 10.1080/14742.837.2014.947253.

No to GMO's Platform (2004) *Genetically Modified Organisms Declaration*. İstanbul: Turkey.

Öniş, Z. (2007) "Conservative globalists versus defensive nationalists: political parties and paradoxes of Europeanization in Turkey", *Journal of Southern Europe and the Balkans*, 9:3, 247-261. doi: 10.1080/146.131.90701689902

Özdamar, T.H. (2009) "Biotechnology in Turkey: an overview". *Biotechnology Journal*, 4:7, 981-991. doi: 10.1002/biot.200900145.

Özer, K. (2010) *Deccal Tabakta,* İstanbul:Hayy Kitap

Paker, H. (2018) "Contesting the "Third Bridge" in İstanbul: Local environmentalism, cosmopolitan attachments?" in Fisher-Onar,N.,Pearce, S.C. & Keyman, E.F. (Eds.) *İstanbul: Living With Difference in a Global City*. New Brunswick, NJ: Rutgers University Press. 145-160.

Pearson, T. W. (2012) "Transgenic-Free Territories in Costa Rica: Networks, Place, and the Politics of Life", *American Ethnologist,* 39:1, 90–105. doi: 10.1111/j.1548-1425.2011.01350.x.

Peschard, K. (2012) "Unexpected Discontent: Exploring New Developments in Brazil's Transgenics Controversy", Canadian *Journal of Development Studies*, 33:3, 326–337. doi: 10.1080/02255.189.2012.719826

Pehlevan, H., Şakacı, B.K. (2018) *Cerattepe Çevre Hareketi*, Bursa: Ekin Basım Yayın.

Purdue, D.A. (2000) Anti-*genetiX: the emergence of the anti-GM movement*, Ashgate:Aldershot.

Reilly, N. (2007) "Linking local and global feminist advocacy: Framing women's rights as human rights in the Republic of Ireland", *Women's Studies International Forum,* 30:2,114-133. doi: 10.1016/j.wsif.2007.01.004.

Rootes, C. (1999) Environmental *Movements: Local, national and global,* London & Portland, OR: Frank Cass

Schnurr, M.A. (2013) "Biotechnology and bio-hegemony in Uganda: unraveling the social relations underpinning the promotion of genetically modified crops into new African markets", *Journal of Peasant Studies*, 40:4, 639– 658.Doi: 10.1080/03066.150.2013.814106.

Schurman, R., Munro W.A. (2010) Fighting *for the Future of Food: Activists versus Agribusiness in the Struggle over Biotechnology*. Minneapolis: University of Minnesota Press.

Scoones, I. (2008) Mobilizing Against GM Crops in India, South Africa and Brazil, *Journal of Agrarian Change*, 8:8, 315-344. doi: 10.1111/j.1471-0366.2008.00172.x.

Seidman, G. W. (2000) "Adjusting the Lens: What do Globalizations, Transnationalism, and Anti-apartheid Movement Mean for Social Movement Theory?" in Guidry, J.A., Kennedy, M.D., & Zald M.N. (Eds.) *Globalizations and Social Movements: Culture, Power and the Transnational Public Sphere.* Ann Arbor: University of Michigan Press. 339-358.

Seifert, F. (2017) "Measuring the Europeanization of the Anti-GM Movement: Evidence from Five EU Countries", *Mobilization*, 22:3, 363–383. doi: 10.17813/1086-671X-20-3-363

Smith, J. (2004) "Transnational Processes and Movements" in Snow, D.A., Soule, S.A, & Kriesi, H., (Eds.) *The Blackwell Companion to Social Movements.* MA and Oxford, UK, Blackwell Publishing. 311-337

Snow, D.A. (2004) "Framing Processes, Ideology and Discursive Fields" in Snow. D.A., Soule S. A, and Kriesi H, (Eds.) *The Blackwell Companion to Social Movements.* MA and Oxford, UK, Blackwell Publishing. 380-412.

Snow, D.A., Benford R.D. (1988) "Ideology, frame resonance, and participant mobilization", in Klandermans. B., Kriesi, H., & Tarrow, S. (Eds) *From Structure to Action: Comparing Social Movement Research across Cultures*, Greenwich, CT: JAI Press.197-217.

Snow, D.A., Benford R.D., (1992) "Master Frames and Cycles of Protest" in Morris, A.D, Mueller, C.Mc. (Eds.) *Frontiers in Social Movement Theory*, New Haven: Yale University Press. 133-155.

Snow, D.A., Rochford, E. B., Worden, S. K., & Benford, R. (1986) "Frame Alignment Processes, Micromobilization and Movement Participation", *American Sociological Review,* 51:4, 464-481. doi: 10.2307/2095581.

Steinberg, M. W. (1995) "The Roar of the Crowd: Repertoires of Discourse and Collective Action among the Spitalfields Silk Weavers in Nineteenth-Century London." in Traugott, M.(Ed.) *Repertoires and Cycles of Collective Actio*n. Durham and London: Duke University Press. 845-872

TBBDM (2021) *Biyogüvenlik Kurulu Toplantı Kararları* Retrieved from http://www.tbbdm.gov.tr/ToplantiKararlari2.aspx

Tilly, C. Tarrow, S. (2007) *Contentious Politics,* Oxford: Oxford University Press.

Tokar, B. (2001) *Redesigning Life? The Worldwide Challenge to Genetic Engineering.* London: Zed Books.

Topal, Ş. (2007) *Değiştirilen Sen mi, Gen mi, Evren mi?* İstanbul:Yeni İnsan Yayınları.

Tosun, J. (2014) "Agricultural Biotechnology in Central and Eastern Europe Determinants of Cultivation Bans", *Sociologia Ruralis,* 54:3, 62-381. doi: 10.1111/soru.12046.

Towers, G. (2000) "Applying the political geography of scale: grassroots strategies and environmental justice", *The Professional Geographer*, 52:1, 23–36. doi: 10.1111/0033-0124.00202.

Tucker, C. (2013) "Using Social Network Analysis and Framing to Assess Collective Identity in the Genetic Engineering Resistance Movement of Aotearoa New Zealand", *Social Movement Studies*, 12:1, 81-95. doi: 10.1111/0033-0124.00202.

Turhan, E., Özkaynak,B.,& Aydın, C.İ. (2019) "Coal, ash, and other tales: The making and remaking of the anti-coal movement in Aliağa, Turkey" in İnal, O. and Turhan, E. (Eds.) *Transforming Socio-Natures in Turkey: Landscapes, State and Environmental Movements.* Oxon and New York, Routledge.166-187

TÜSEV (2013) The Yemezler (We Won't Eat It) Campaign Case Analysis Retrieved from https://tusev.org.tr/usrfiles/images/YemezlerVakaAnaliziENG.06.11.13.pdf

Uncu, B. A. (2016) "From a Conflictual Coalition to a Social Movement? The Transformative Capacity of the Gezi Protests", *Southeastern Europe*, 40:2, 188-216 doi: 10.1111/0033-0124.00202.

Velardi, S., Selfa T. (2020) "Framing local: an analysis of framing strategies for genetically modified organism (GMO) labeling initiatives in the northeastern U.S", *Agroecology and Sustainable Food Systems*, 45:3, 366-389. doi: 10.1080/21683.565.2020.1818159.

Williams, G. (2008) "Cosmopolitanism and the French Anti-GM Movement", *Nature and Culture,* 3:1, 115-133. doi: 10.3167/nc.2008.030108.

Williams, R.W. (1999) "Environmental injustice in America and its politics of scale", *Political Geography,* 18:1, 49–73. doi: 10.1016/S0962-6298(98)00076-6.

Yağcı, A.H. (2018) "Policy Knowledge, Collective Action and Advocacy Coalitions: Regulating GMOs in Turkey", *Journal of European Public Policy.* 26:6, 927-945. doi: 10.1080/13501.763.2018.1509884.

List of Interviewees

1) Woman, 37, Industrial designer, İstanbul, national environmental NGO campaigner, 04/02/2007
2) Man, 39, Medical doctor, İstanbul, Ex-Green Party activist, 14/03/2007
3) Man, 40, Trade unionist, İstanbul, No to GMOs Platform activist, 01/02/2007
4) Woman, 31, Communication professional, İstanbul, No to GMOs Platform activist, 02/020/2007
5) Man, 44, Lawyer, İstanbul Consumer rights activist, 27/03/2007
6) Woman, 40, Journalist, İstanbul, Environmental activist, 14/02/2007
7) Man, 53, Agriculturalist, İstanbul, Farmer activist, unionist 05/05/2009
8) Woman, 26, İstanbul, Biologist, No to GMOs Platform activist, 23/02/2007
9) Man, 41, İstanbul, Agricultural engineer, No to GMOs Platform activist 13/08/2009
10) Man, 30, Postgraduate student, İstanbul, national environmental activist, 01/06/2009
11) Woman, 34, Architect, İstanbul, No to GMOs Platform activist, 04/04/2007
12) Woman, 31, Food engineer, İstanbul, No to GMOs Platform activist, 06/03/2007
13) Woman, 47, Agricultural engineer, İzmir, Chambre of Agricultural Engineers, 28/03/2007
14) Man, 45, Agricultural engineer, İzmir, Chambre of Agricultural Engineers, 28/03/2007
15) Man, 50, Agriculturalist, Ankara, Farmer activist, unionist, 16/10/2007
16) Man, 28, Lawyer, Ankara, Environmental activist, 16/10/2007
17) Man, 26, Biologist, Ankara, No to GMOs Platform activist 15/10/2007
18) Woman, 27, Lawyer, Ankara, No to GMOs Platform activist, 15/10/2007
19) Man, 23, Ankara, Student, 16/07/2007
20) Woman, 41, Electrical engineer, Denizli, local environmental activist, 15/03/2008
21) Man, 50, Agricultural engineer, Denizli, Chamber of Agricultural Engineers 15/03/2008

22) Man, 51, Engineer, Muğla, local environmental activist, 16/03/2008
23) Man, 51, Agricultural engineer, Bursa, No to GMOs Platform activist, 06/01/2008
24) Man, 52, Agricultural technician, Bursa, local environmental activist, 06/01/2008
25) Man, 42, Municipal worker, Bursa, local environmental activist, 07/01/2008
26) Woman, 34, Urban planner, Bursa, political activist, 07/01/2008
27) Man, 56, Agricultural engineer, Bursa, Chambre of Agricultural Engineers, 08/01/2008
28) Man, 40, Academician, Trabzon, Local environmental activist, 28/03/2008
29) Man, 40, Academician Samsun, 30/03/2008
30) Woman, 56, İzmit, local environmental activist, 21/01/2008
31) Woman, 32, PhD student, İstanbul, No to GMOs Platform, 22/02/2007
32) Man, 43, Medical Doctor, İstanbul, No to GMOs Platform, 28/02/2007
33) Man, 38, Lawyer, Adana, Local environmental activist, 25/06/2008
34) Woman, 38, Lawyer, Tarsus, Local environmental activist, 24/06/2008
35) Man, 33, Bursa, Local environmental activist, 06/01/2008
36) Man, 66, Pharmacist, İskenderun, Local environmental activist, 24/06/2008