SSRP Week

7-11 November 2022

University of Sussex

Is sustainability possible in conflict zones?

The experience in northwest Syria.

Friday, 11 November 2022, 15:00-17:00

G32 Jubilee, University of Sussex

UNIVERSITY OF SUSSEX

SSRP

Academics & Experts for Sustainable Development

Agenda

15:00-15:05 Welcome and intro by chair

15:05-15:45 AVS Coordination Team

- *AVS: an interdisciplinary and impact-oriented project,* Dr Mirela Barbu
- *Social media to promote sustainability in difficult contexts,* Prof Martin Spinelli
- *Sustainable agriculture and food security in Northwest Syria*, Dr Shaher Abdullateef

15:45-15:55 Q&A

15:55-16:25 Panel Discussion on "Reaching for sustainable solutions in conflict zones"

- *Prof Jeremy Allouche, Institute of Development Studies*
- *Prof Adrian Smith, Business School, University of Sussex*
- *Prof Martin Spinelli, MAH, University of Sussex*
- *Dr Shaher Abdullateef, Syrian Academic Expertise, Turkey*
- *Dr Mirela Barbu, Business School, University of Sussex*

Chair: Prof Joseph Alcamo, Global Studies, University of Sussex

16:25-16:30 Closing remarks: Prof Joseph Alcamo

An interdisciplinary and impact-oriented project

>> Activities planned and implemented

>> Outcomes, outputs and budget

Dr Mirela Barbu

University of Sussex, Business School

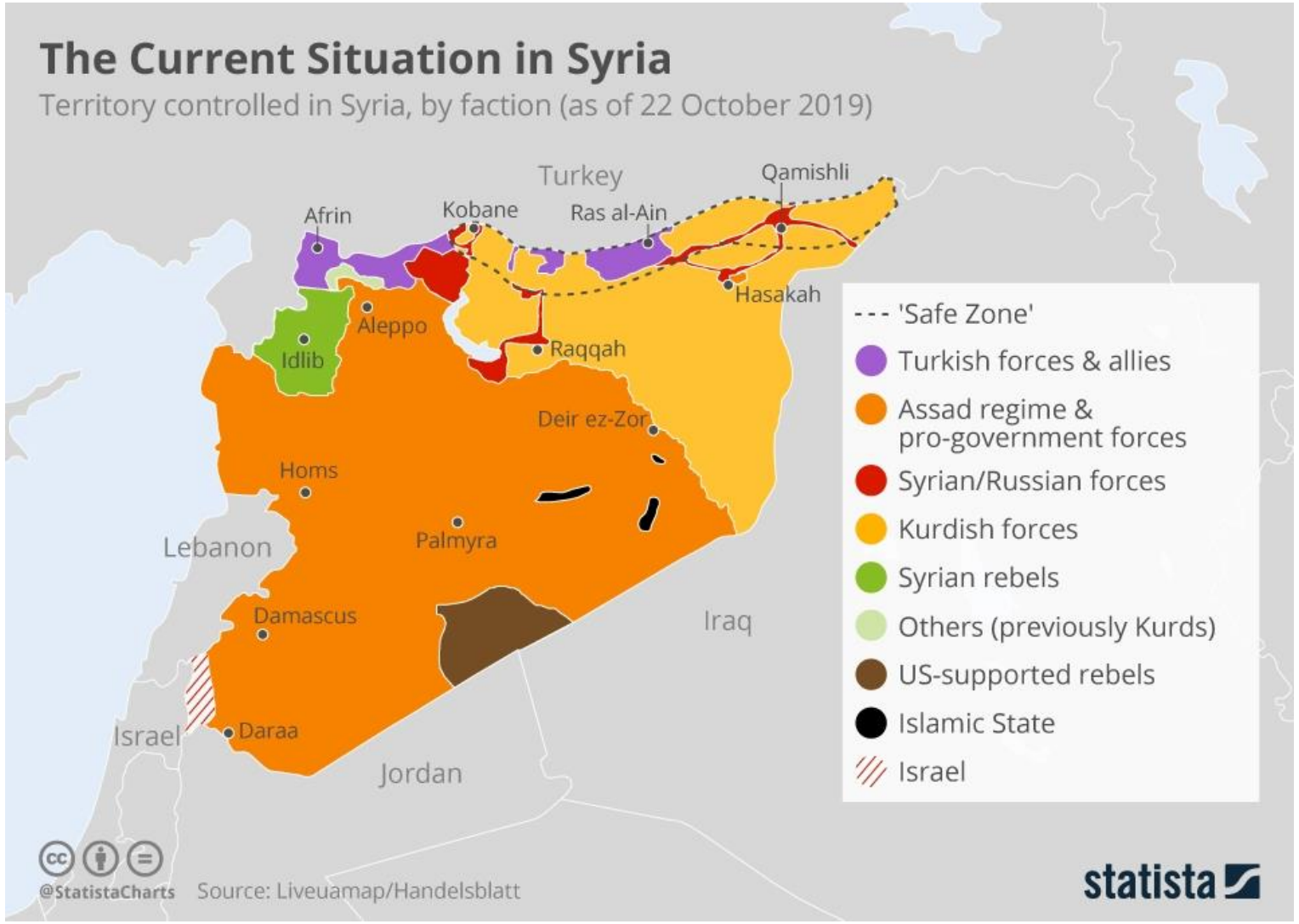
Expertise: Value Chains & Sustainability

Tenacious & perfectionist

m.e.barbu@sussex.ac.uk

The Geography of the conflict

Source: https://www.statista.com/chart/19580/territory-controlled-by-faction-in-syria/

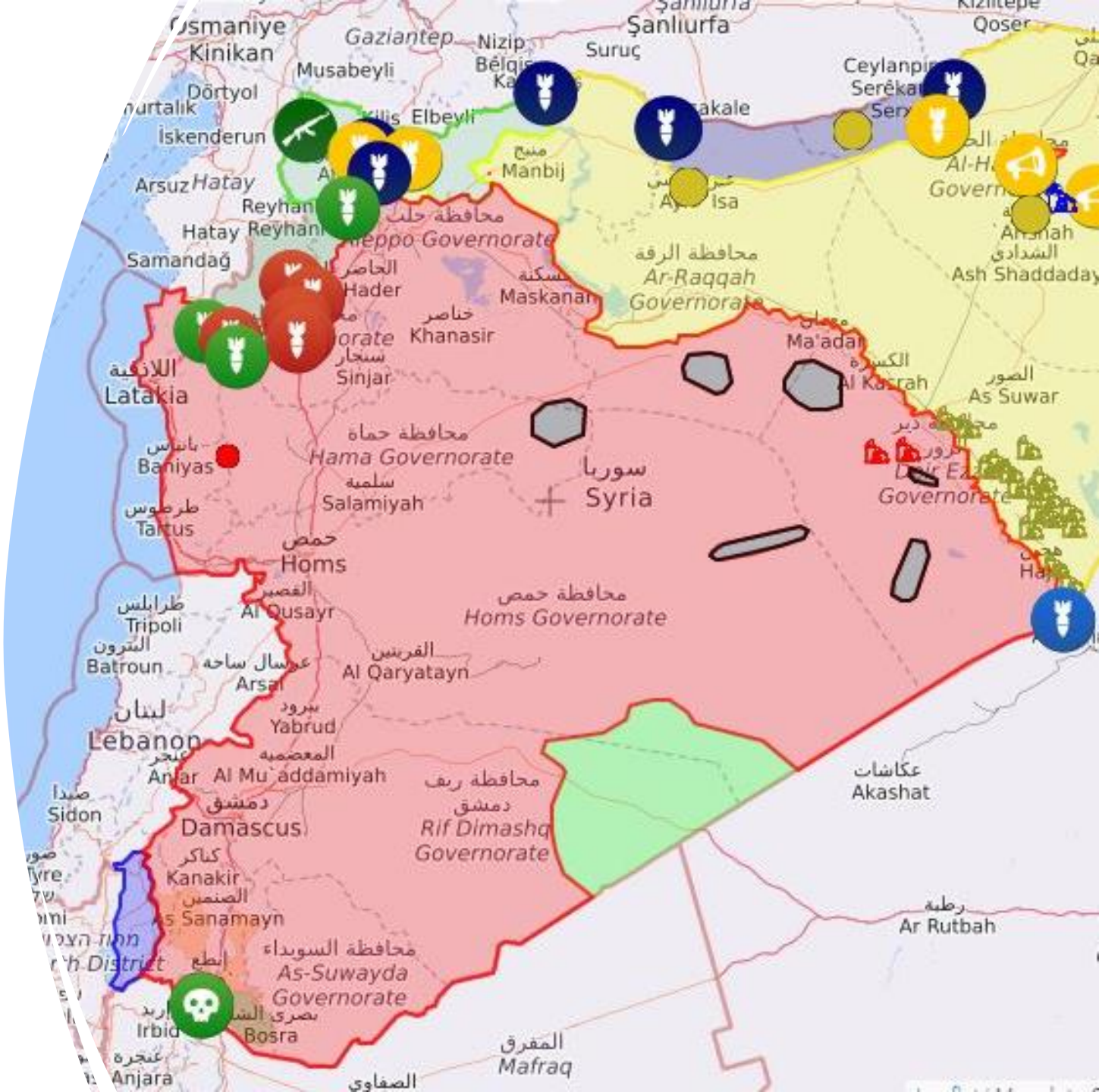


UN Security Council: Bab al-Hawa crossing point for humanitarian assistance remains open until 10 January 2023.
UN Human Rights Office Report: more than 300,000 civilians have been killed in Syria between 2011 and 2021.

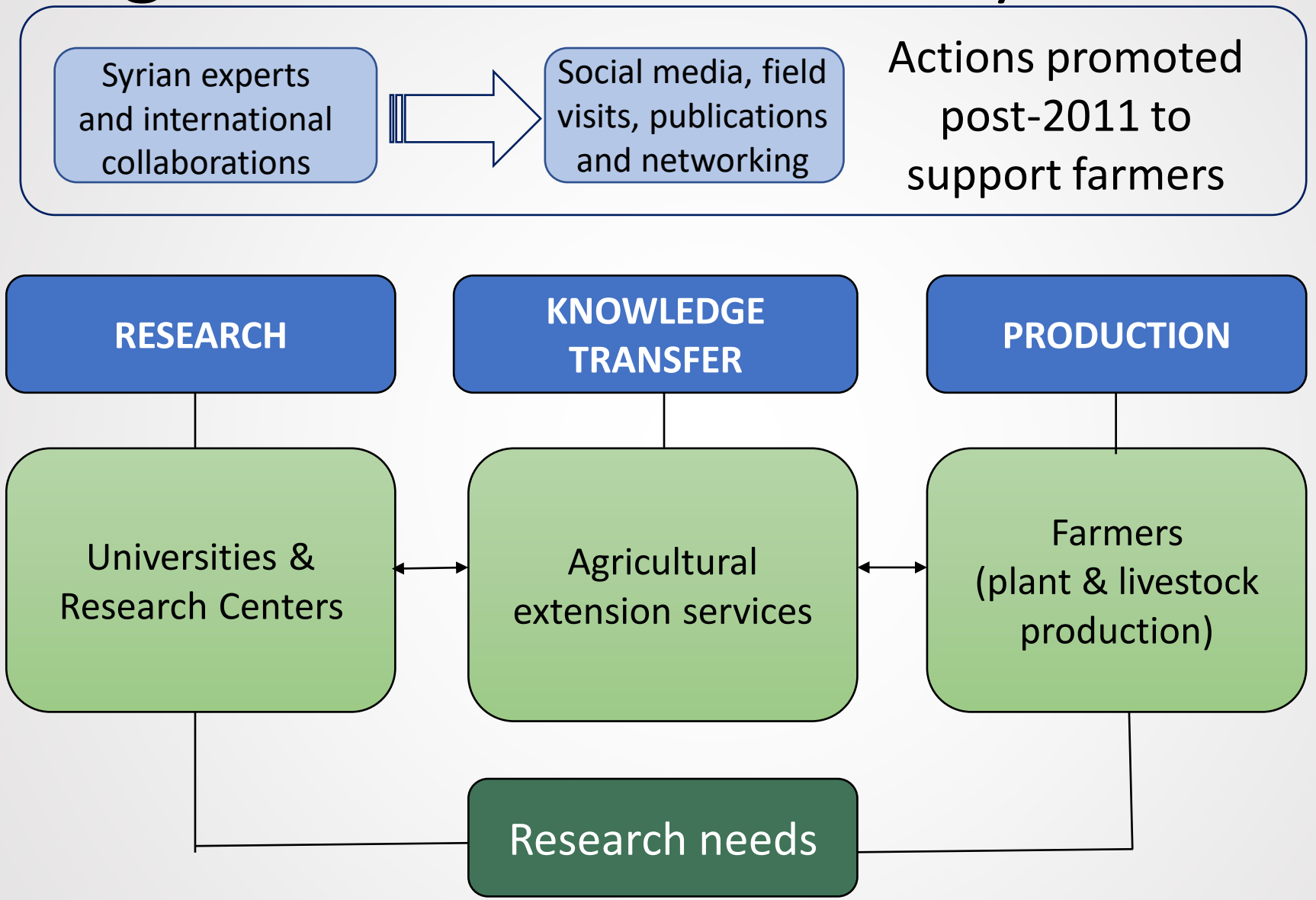
Live Universal Awareness Map [Liveuamap]

- Liveuamap is an internet service which uses A.I. to geolocate and verify security-related data from social media (Twitter, Facebook, Instagram and Telegram) for defined areas. It provides information about ongoing armed conflicts localising them on a geographical map.
- It was developed by two Ukrainian engineers before 2014 to track Russian activities in Crimea. It provides real-time information.

Source: https://syria.liveuamap.com/



Agricultural Extension System



Source: Abdullateef S. et al (2020), *Education and Conflict Review* 3, 67-76

Project(s) Goals

GCRF Challenge Area: Equitable access to sustainable development

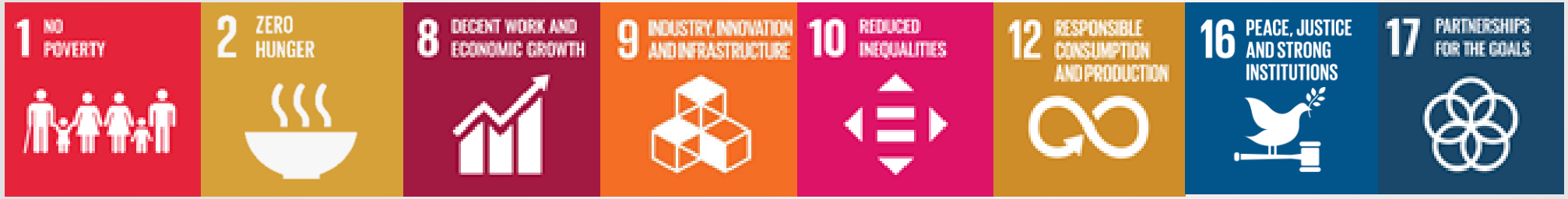
Secure and resilient food systems supported by sustainable agriculture.

1. Provide Syrian agricultural experts with new media to support farmers.
2. Promote capacity building and knowledge transfer.
3. Promote sustainable agriculture in Northwest Syria.

PROJECT I (Jan - July 2021)
Funder: IDCF-SSRP (25K)
Welcome to the Syrian Farmers Podcast! Promoting sustainable agri-food value chains in Syria through podcasting.

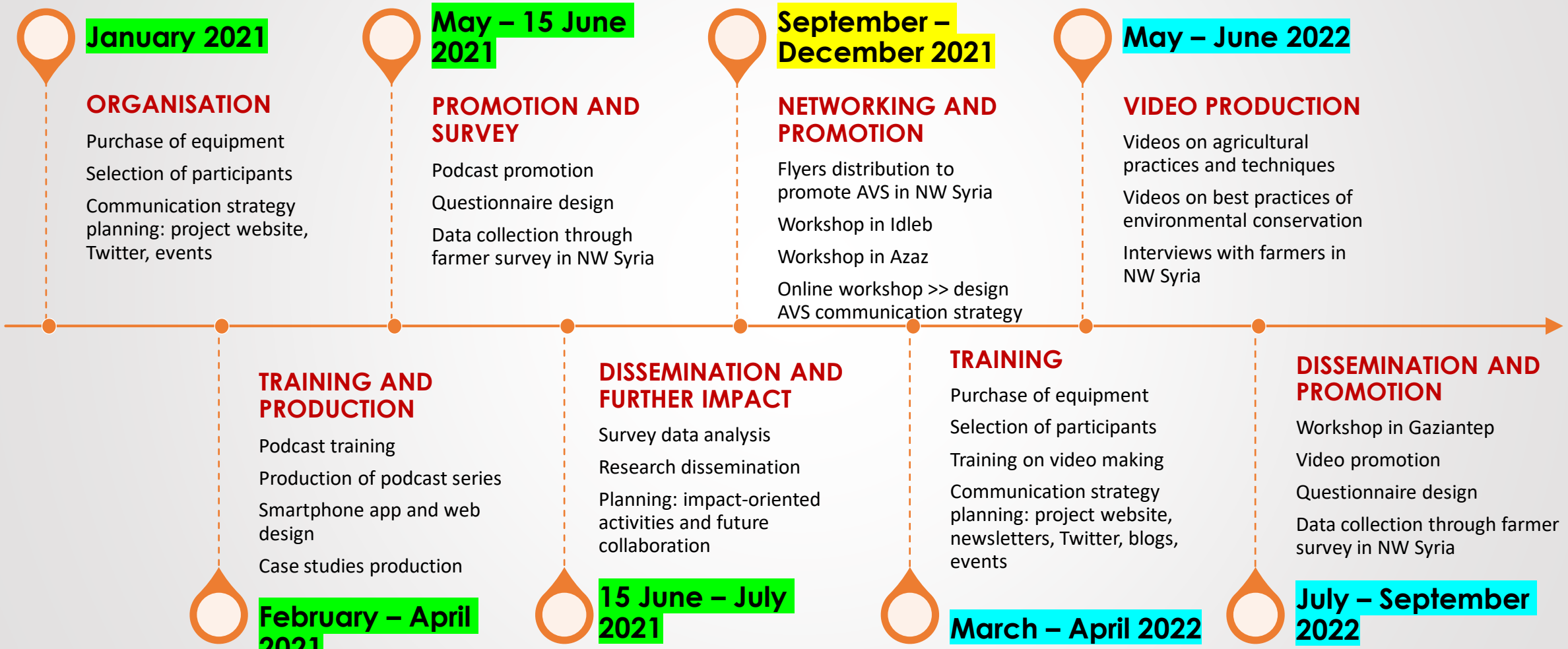
PROJECT II (Sept - Dec 2021)
Funder: SSRP Impact Fund (5K)
Agricultural Voices of Syria: closer to farmers, stronger for communities.

PROJECT III (March - July 2022)
Funder: SSRP (15K)
Agricultural Voices respond to Syrian farmers. Using digital infrastructure to improve food security and environmental conservation in Northwest Syria.



FOCUS ON:
SDG 2
SDG 12
SDG16

Activities (all projects)



Outputs available on the Agricultural Voices website

Outputs Project I

- 15 podcast episodes
- AVS smartphone app
- 5 case studies on successful practices in agrifood value chains: Report (EN) & Recordings (EN/ARA)
- Highlights of farmer survey in NW Syria (2021)

Outputs Project II

- Flyer to promote AVS in NW Syria (ARA)
- Report from workshops in NW Syria (EN/ARA)
- Report from on-line workshop (EN/ARA)
- Policy brief (EN)

Outputs Project III

- 15 videos
- 16 newsletters (EN/ARA)
- Blog drawing on workshop in Gaziantep (EN)
- Highlights of farmer survey in NW Syria (2022)

Budget (all projects)

Project I – Total Budget	**£25,000**
Activities run by University of Sussex	**32%**
Activities run by Cara and SAE	**68%**
of which:	
activities re. podcast production & promotion Syria/ Turkey	51%
activities re. podcast production & promotion UK	49%

Project II – Total Budget	**£5,000**
Activities run by University of Sussex	**10%**
Activities run by Cara and SAE	**90%**
of which:	
impact activities Syria/ Turkey	78%
impact activities UK	22%

Project III – Total Budget	**£15,000**
Activities run by University of Sussex	**32%**
Activities run by Cara and SAE	**68%**
of which:	
activities re. video production & promotion Syria/ Turkey	84%
translation services UK	16%

Impact-oriented Project

Knowledge production

- Address farmers' needs delivering extension services through podcasting and video production.
- Anticipate areas of interest in the agri-food value chains.

Promotion and surveys

- Instruct farmers on how to download the app, use the podcasts and videos, and subscribe to the user community.
- Collect survey data from farmers across various locations.

Data analysis

- Plan AVS future activities drawing on farmers' feedback.
- Include other stakeholders: seed sellers, agricultural pharmacies, local universities, local councils, international and local NGOs.
- Inform policy makers.

Social media to promote sustainability in difficult contexts

>> Challenges and opportunities

>> What we learned from this project

Prof Martin Spinelli

University of Sussex, MAH

Expertise: Podcasting & Media Production

Creative & Problem-solver

m.j.spinelli@gmail.com

AVS as an opportunity to think about new media in conflict zones and other difficult contexts

The specific need and context:

- ❑ The war caused:
  - the collapse of agricultural extension services
  - mass internal displacement of farmers
  - food insecurity
  - the degradation of conventional broadcasting infrastructure, meaning it was much harder to reach farmers in usual ways
  - (VERY IMPORTANT) a dispersal of the expert and intellectual talent of Syria with many leaving and living in exile, meaning a fragmentation of the local knowledge base
- ❑ We found very little data about mobile phone use and app use in Syria specifically.
- ❑ Pew Research Centre report from 2019 on “emerging economies” says 53% of adults had access to smartphones.

We decided to test some assumptions in a conflict zone with AVS, to see if podcasting was a means that could provide these services and open the doors to other kinds of communication.

Why start with podcasting?

- Economical
- Easy to produce in situ
- Easy to consume—hands-free, eyes-free medium; “complimentary medium”
- Proven useful in connecting disparate communities
- Emergent communication technology embedded in social media that is not subject to the scrutiny, regulation and control of more established media—it’s freer
- History in other countries of using podcasting to give voice to people marginalized by official, authorized and licensed media channels

Our process:

- ❑ Recruit experts
- ❑ Train them remotely in making podcasts
- ❑ Start making podcasts
- ❑ Promote the podcasts to farmers on the ground
- ❑ Show farmers how to access them (VPNs)
- ❑ Then run a survey to verify impact and effect

AVS Podcast Survey

- To our knowledge, this was the first survey of podcast use in a conflict zone (May & June of 2021).
- 15 promoters introduced AVS to farmers in northwest Syria using IRL contacts and social platforms like WhatsApp.
- Approximate 1,000 farmers surveyed for information about their relationship to their farmland, ownership and use of technology, social media usage, the tone of AVS, ease of access to AVS and suggestions for future topics, improvements and support material.
- 76% of our listeners were new to podcasting. A huge opportunity to define the form and set expectation. (Podcasting should be very appealing to NGOs.)
- At time of survey: 1,717 unique listeners (982 via Anchor + 735 via Castbox).
- Averaging 620 listens per week—very good for a new podcast of this type.

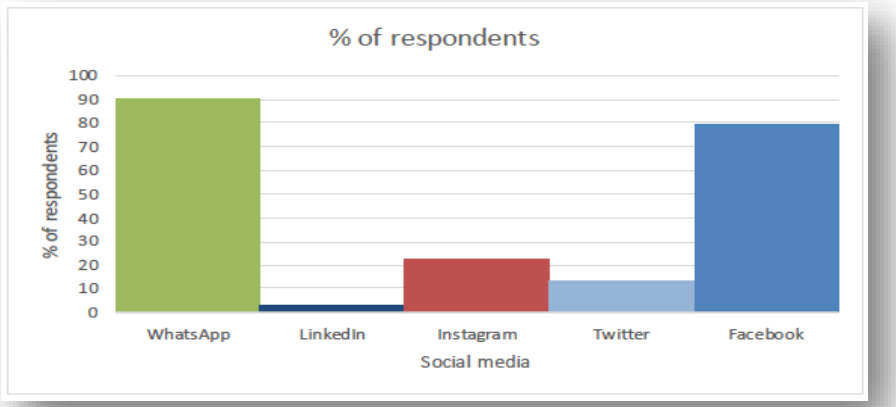
AVS Access and User Data

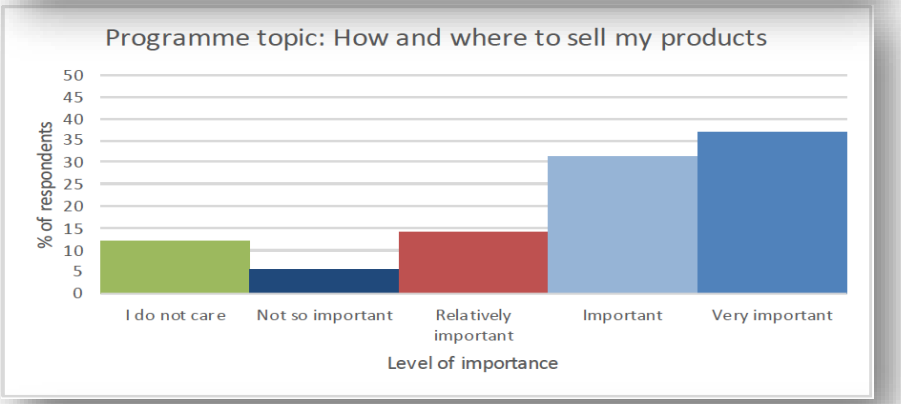
AVS podcast is available on:

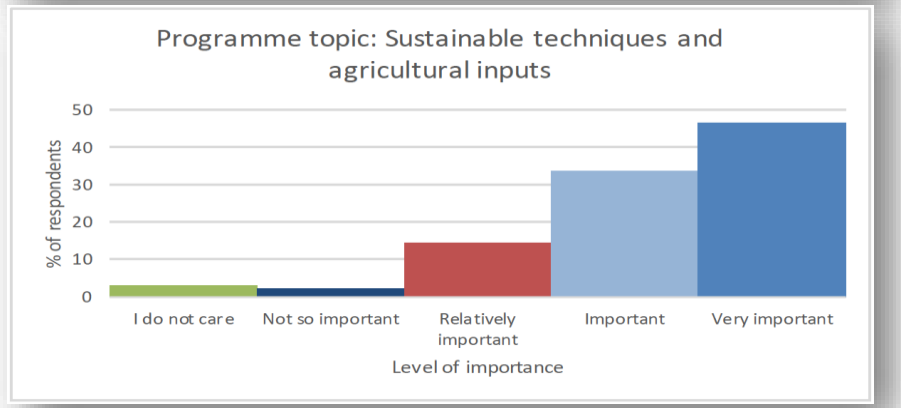
- ❑ Phone App
- ❑ Three podcast platforms
  - *Spotify*
  - *CastBox*
  - *Anchor*
- ❑ More than 12,000 downloads as Nov. 22
- ❑ AVS newsletter reaches more than 7,000 farmers on Facebook.

Additional Podcast Survey Results

- Consistent with other surveys that have looked at technology ownership in the developing world (Pew 2019), our survey of conflict-zone technology showed an ownership level of smartphones as 78%- surprising.
- General social media usage reported by our respondents was also higher than anticipated. WhatsApp and Facebook were clearly dominant. This is useful information in guiding the promotion of future AVS undertakings and similar related agricultural media projects in Northwest Syria.
- When asked about future AVS episodes, sustainable farming practices and Syrian food were the most popular, closely followed by new financial opportunities for their activities. The response to the sustainability option is promising–even with the challenges of the conflict and displacement, an awareness of the economic and ecological long-term imperatives of sustainability is present among these farmers. We also need to be careful about how "sustainability" is defined in future surveys.





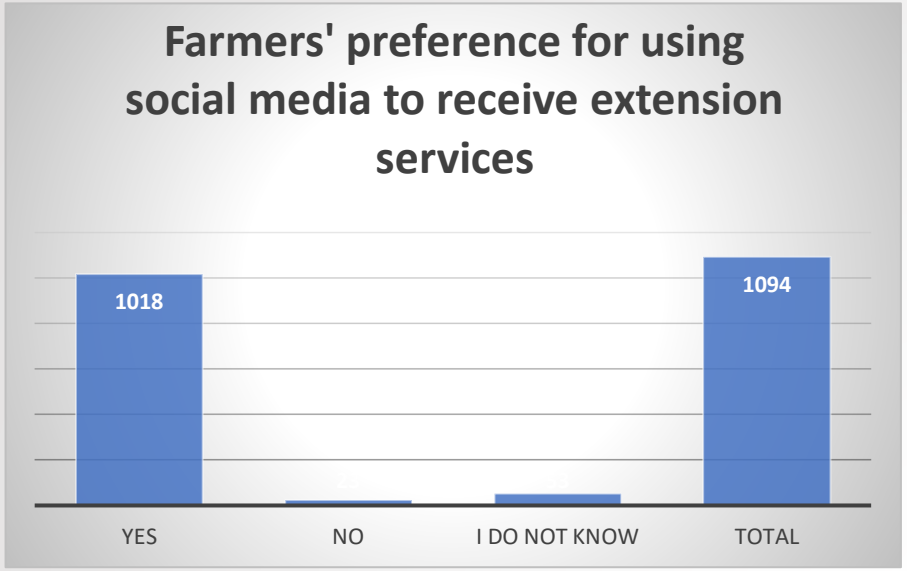


Source: AVS Survey 2021

AVS Podcast Survey: Summary of qualitative answers

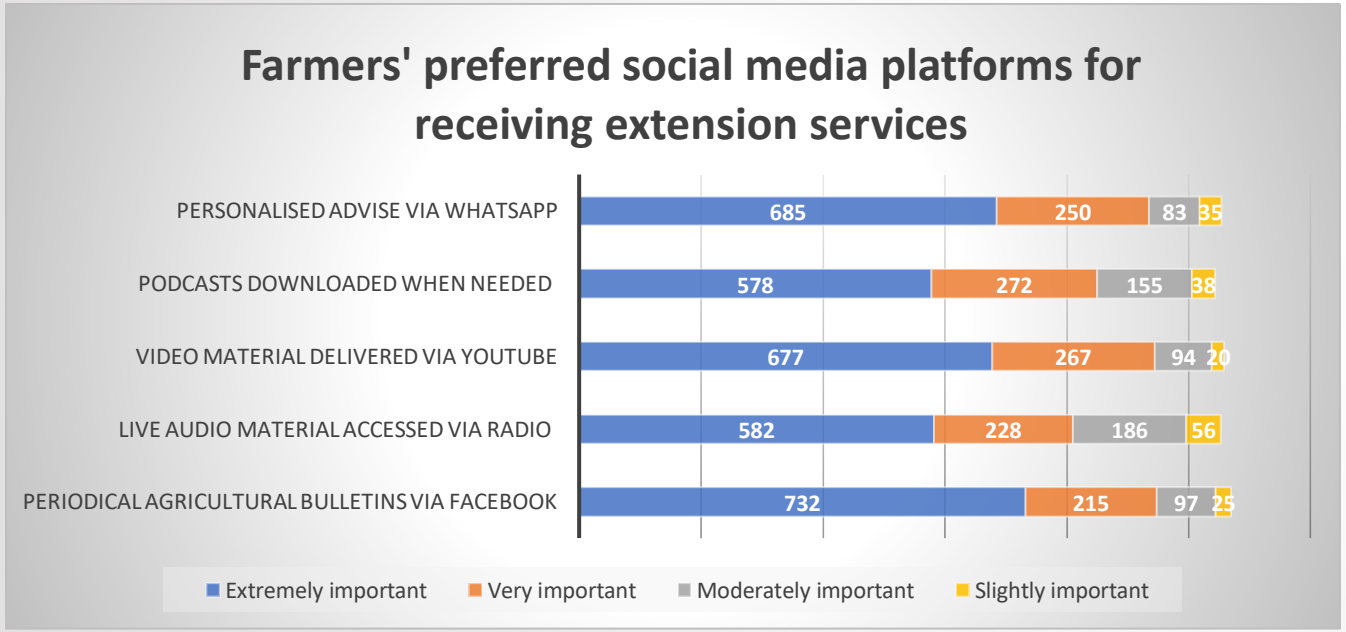
How to improve AVS?	Frequency	% of farmers who made comments
▪ Shorter episodes	55	24.9
▪ Specific content about agricultural products, livestock and farming techniques	46	20.8
▪ Video recordings	45	20.4
▪ More and better content of the episodes	32	13.6
▪ Episodes available offline	18	8.1
▪ Interact with guests (farmers)	18	8.1
▪ Provide agricultural training and practical demonstrations	14	6.3
▪ Field visits	13	5.9
▪ Improve sound quality	9	4.1
▪ Improve dissemination	8	3.6
▪ Actual content is very good	8	3.6

Source: AVS Survey 2021



AVS Video Series Survey Highlights

- The top chart shows overwhelming support among our respondents for receiving extension services via the new media. This is promising for taking this model forward.

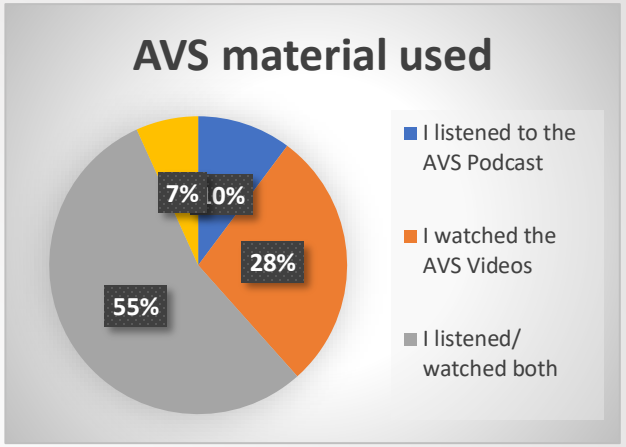


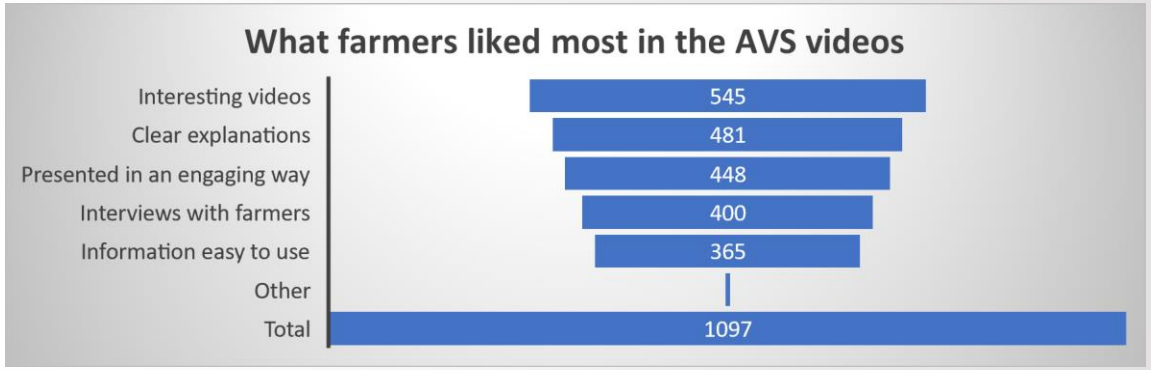
- The oldest and most conventional social media, Facebook, was the most popular means for receiving this information. Interestingly, despite having the trail blazed by podcasting for this material, they are slightly keener on print and video methods—perhaps because much of it is demonstration of techniques which is obviously easier to absorb visually.

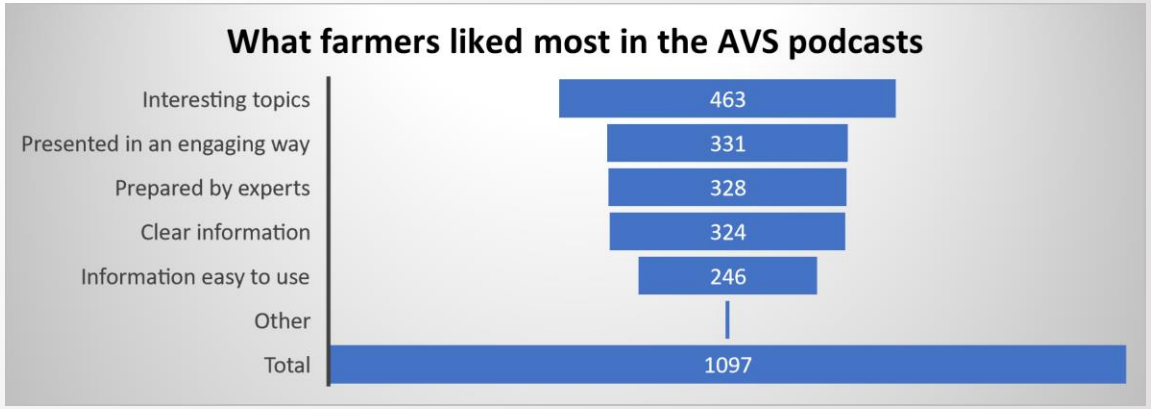
Source: AVS Survey 2022

AVS Video Survey Highlights

- The two media forms did seem complementary in the survey with the majority of the respondents saying they consumed both video and audio.
- 72% of the podcast users said they liked the material, while 77% of the video users said they liked the material.
- Respondents most like the appeal of the video topics, followed by the engaging way they were presented. It's worth noting that the producers had refined their presentation techniques in the podcasts and become better presenters and producers. The videos are more dynamic while the first podcasts can sound like lectures. We take from this that there is merit in an integrated or trans-media approach.





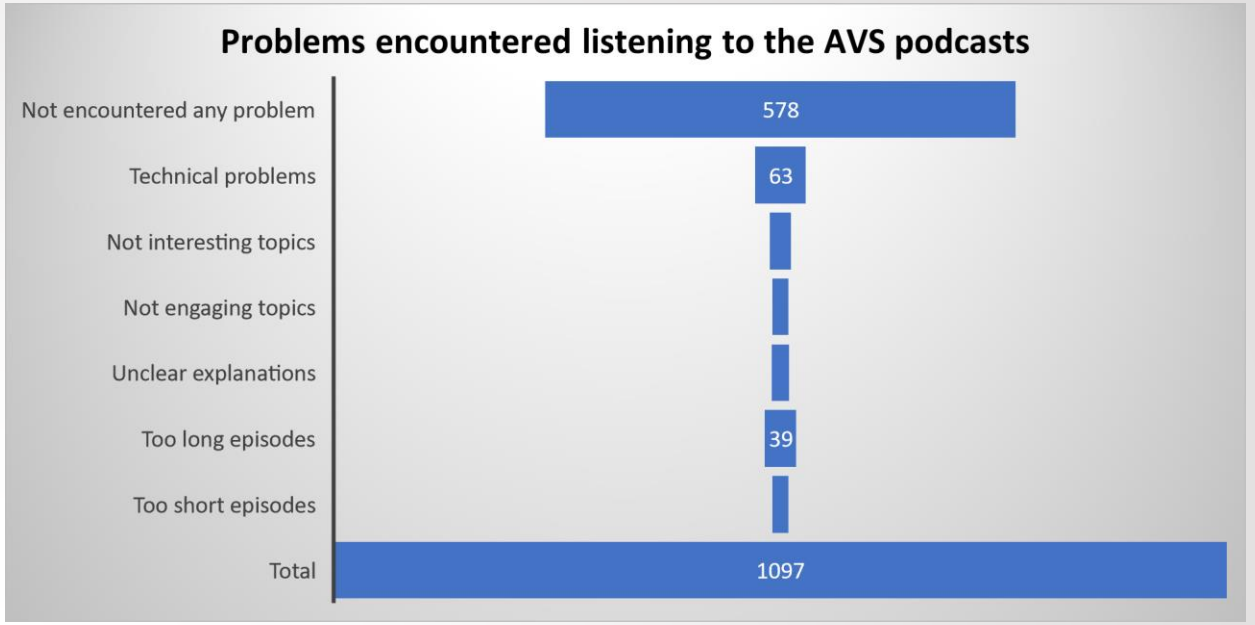


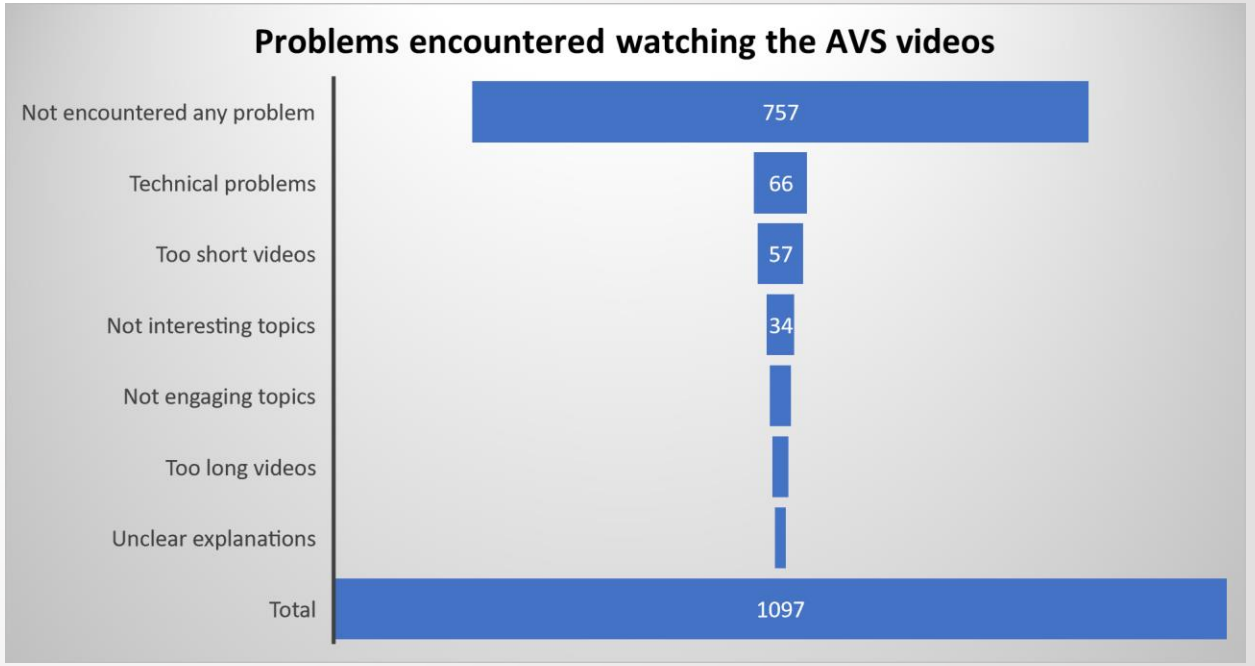
Source: AVS Survey 2022

AVS Video Survey Highlights

Here we compared the technological challenges and content issues between the podcasts and the videos.

While there were fewer tech problems in accessing the podcasts, the improved production values in the videos and the shorter length proved more appealing.



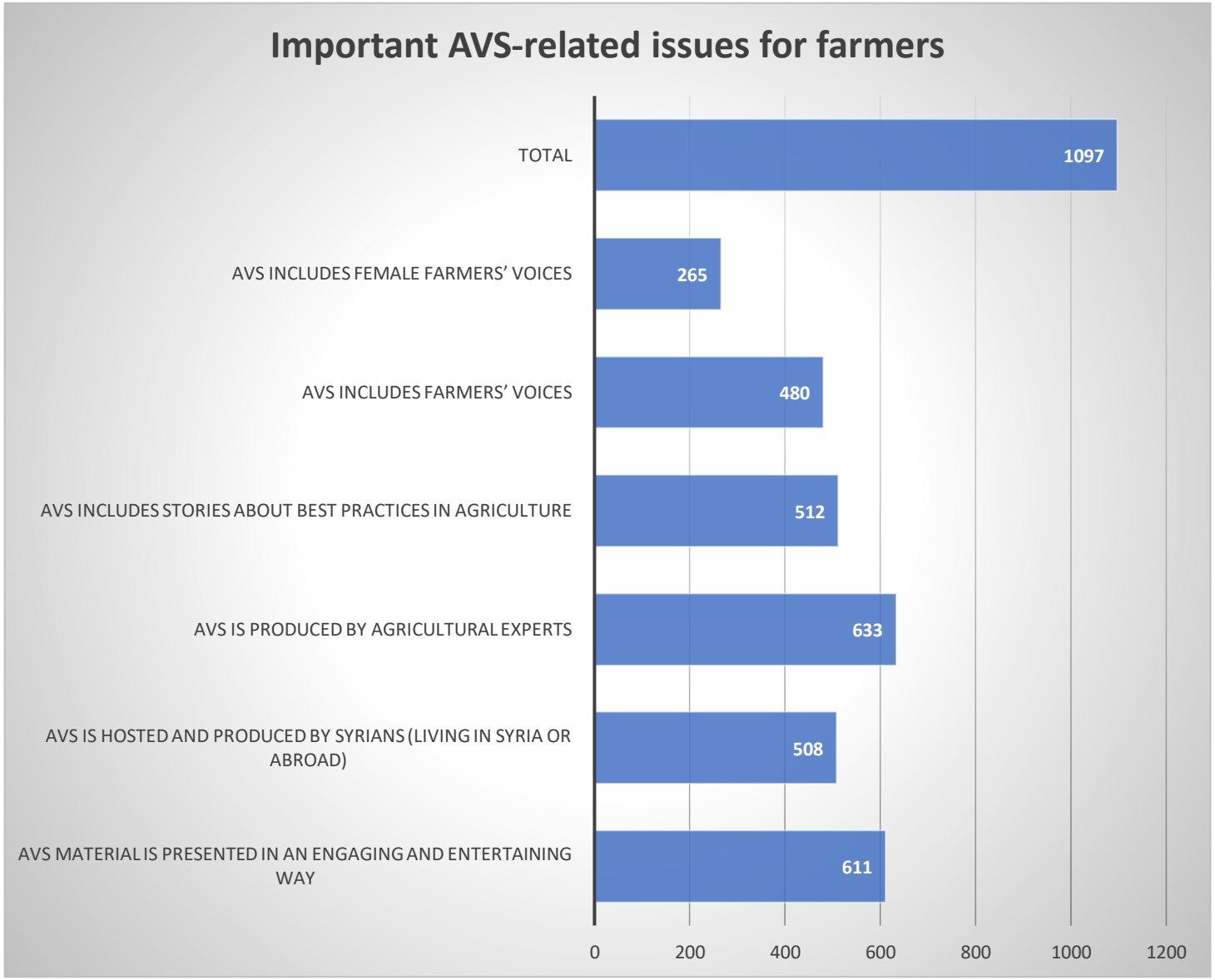


Source: AVS Survey 2022

AVS Video Survey Highlights

In terms of what was most important for our users off the back of the whole of the AVS project:

- The expertise of the producers and presenters was the most important.
- The entertaining and engaging presentational mode was also very important.
- While nearly half said including actual farmers' voices in the productions was important, only about a quarter said that hearing the voices of female farmers was important (our sample included 262 women farmers, and those wanting female voices numbered 265).



Source: AVS Survey 2022

Sustainable agriculture and food security in Northwest Syria

>> Environmental emergencies

>> AVS podcast and video series

>> Challenges and future actions

Dr Shaher Abdullateef

Syrian Academic Expertise, Turkey

Expertise: Agronomy & Food Security

Patient & diplomatic

shaher.abdullateef@gmail.com

Agricultural sector and food security

- Syria's agricultural sector is struggling to produce enough product to meet the needs of the population.
- At least 12.4 million of Syria's population (16 million) are food insecure, an increase of 3.1 million per year.
- Years of conflict, displacement, and the devaluation of the Syrian currency have affected the lives and nutritional status of Syria's most vulnerable people, including women and children.
- The cost of the minimum food basket increased by 36% since the conflict of Russian-Ukraine. Global food prices increase by 30% (FAO).
- Wheat price increased by more than 50% since last year.

Agricultural sector and food security

According to the FAO, livestock breeders (especially of sheep and goat) suffered severely from the following interconnected constraints:

- High prices and low quality of animal feed.
- Shortage of pastures due to poor rainfall season in most of the Badia regions (NE Syria).
- High cost of veterinary medicines.
- High watering costs and transportation costs of fodder.

Livestock population has decreased by more than 50% since the beginning of the conflict.

Agricultural sector and food security

Drivers of Change post-2011

Climate/Environmental stressors

- Rising temperature
- Water shortage
- Inadequate rainfall
- Soil quality deterioration
- Frost
- Flood in selected areas
- Pests and diseases
- Fire
- Drought
- Deforestation

Agricultural sector and food security

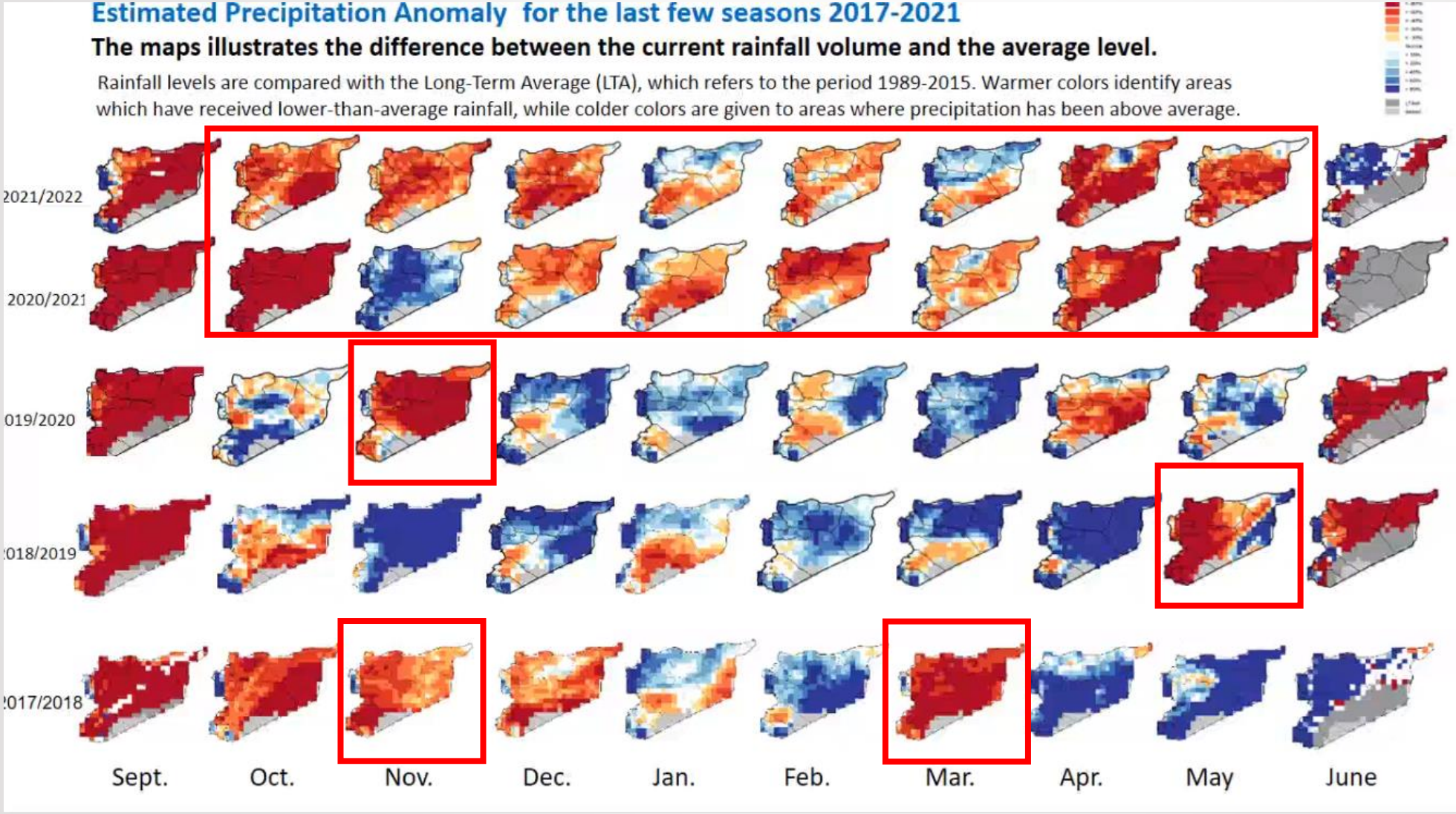
Drivers of Change post-2011

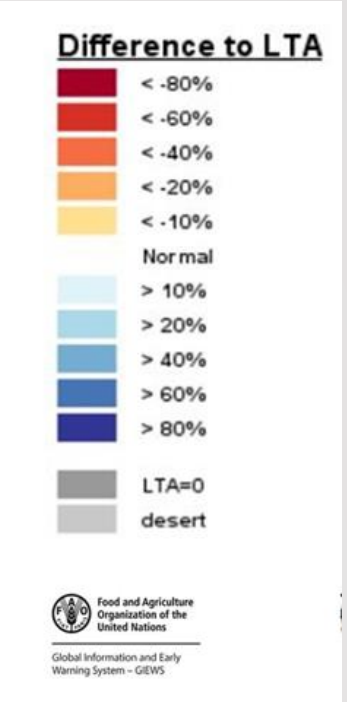
Non-environmental stressors

- Conflict, political instability, displacement/ insecurity
- Lack of governmental projects, planning and policies
- Unstable markets/suspension of markets
- Lack to limited access to quality seeds, feeds, fertilizers and pesticides
- Lack of water/irrigation facilities
- High cost of fuel, inputs, veterinary services and logistics
- Lack of access to storage and postharvest facilities
- Lack of local biodiversity protection
- Macro-economic conditions
- Lack of access to agricultural extension and training services and research

Agriculture sector and food security

Climate change





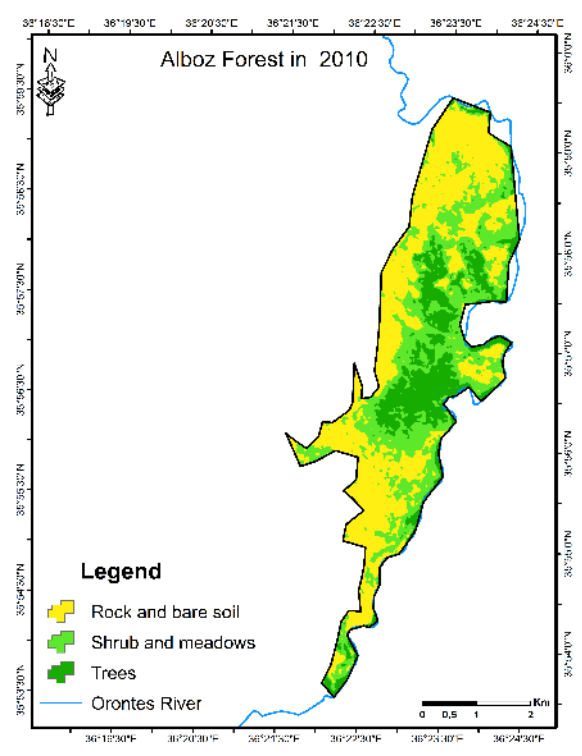
- ❑Growing season pushed back at least 2 weeks.
- ❑Longer intervals between rainfalls.
- ❑Reduced rainfall volume.

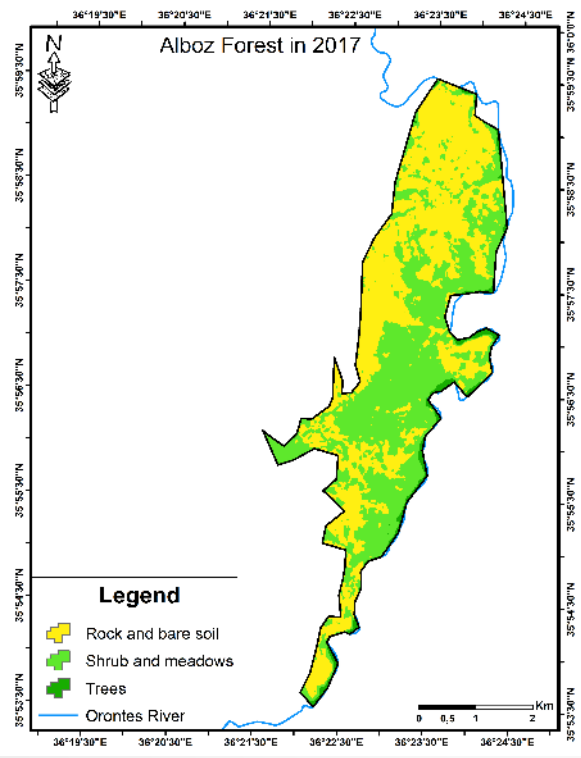
Source:https://www.fao.org/giews/earthobservation/country/index.jsp?lang=en&code=SYR

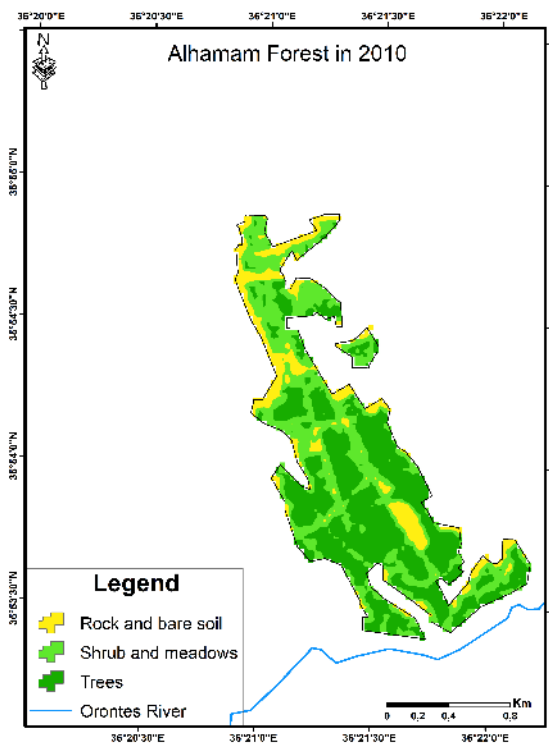
Agriculture sector and food security

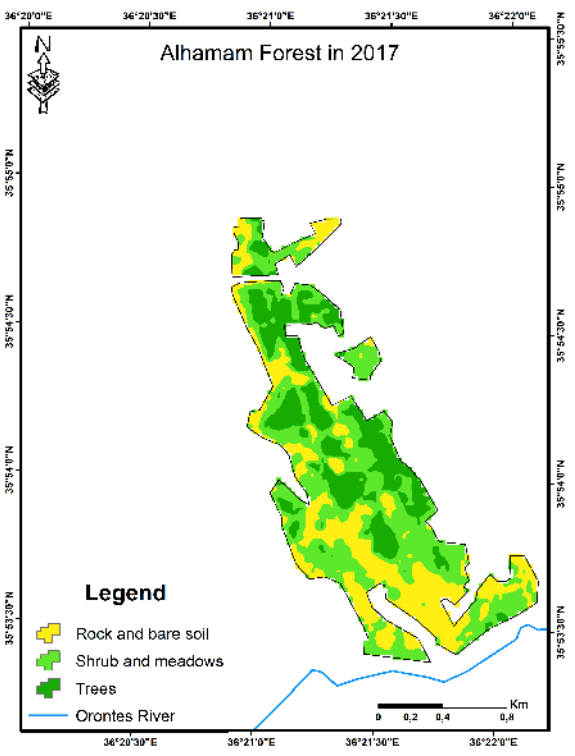
Deforestation in Idleb Governorate

The satellite image analysis for this study indicate that there was a large deforestation in high-density area (trees cover) during the armed conflict (2017 vs 2010): **99% in Alboz forest** and **48% in Alhamam forest.**









Source: Aldakhil et al (forthcoming)

What SAE does:

- Research on climate change, food security, deforestation, agri-food value chains.
- Knowledge production and sharing, including bulletins, podcasts, videos and guidelines.
- Participatory workshops with farmers, livestock breeders, agronomists, international and local NGOs and local councils.
- Field visits and training.
- Networking via social media and workshops, free consultancy and best practice dissemination.
- Development projects: home gardening, greywater use for irrigation, hydroponics.

Agriculture sector and food security

Key crops for domestic consumption

AVS delivers information to farmers about how to grow these crops using sustainable agricultural inputs and techniques.

Crops	Season		Sufficiency
	Winter	Summer	
Wheat	●		---
Barley	●		---
Maize		●	---
Lentil	●		+
Chickpea	●		+
Potato	●	●	+ -
Lettuce	●		+
Cabbage	●		+
Tomato	●	●	+
Eggplant		●	+
Cucumber		●	+
Watermelon		●	+
Olive	●	●	++
Citrus	●	●	+
Figs	●	●	+
Grapes	●	●	+
Pistachio	●	●	++
Black cumin	●		+++
Cumin	●		+++

Source: SAE elaborations based on field data (NW Syria)

Innovative social media for promoting sustainable development in agriculture

Agricultural Voices Syria Podcast

AVS Podcast Host: Eng. Zuhier Agha

AVS Podcast Series

Topics	# Episodes
AVS introduction	2
Olive trees	2
Vegetable seedlings	2
Potato diseases	2
Organic fertilizers	2
Economic crops	3
Local seeds	2
Vegetable cultivation	3
Soil fertility	2
Food conservation	1
Hydroponics	2
Beekeeping	1
Inter-cropping	1
Permaculture – home gardens	4
Local councils	1

AVS promotional flyer distributed to farmers and agricultural businesses in northwest Syria in September 2021; produced by the Syrian Academic Expertise, funded by the SSRP Impact Fund.

Agricultural Voices Syria Videos

AVS Video Team (left to right): Eng. Anas Abo Tarbosh, Eng. Mahmoud Alasad, Eng. Gassan Abboudnd, Mr Ibrahim Alnahar, Eng. Ahmad Alshaher and Eng. Wesam Abboud

AVS Videos

Topics	Views Nov 22
Wheat cultivation	1.5K
Conservation agriculture	1.3K
Agricultural nurseries for seedlings production	337
Use of Solar Energy for Irrigation	361
Safflower cultivation	12.2K
Date palm seedlings - farmer	729
Grape farming	1.1K
Hydroponics – 3 farmers	516
Beekeeping	432
Water Buffalo - an Endangered Animal in Syria	139
Alfalfa cultivation: an alternative livestock fodder crop	6.9K
Banana farming	687
Olive By-product: Olive Pomace	91
Dairy Products in NW Syria	52
Enhancing Summer Vegetable Production	58

Participatory workshops with decision makers and agricultural experts

Challenges discussed

- Low input quality, no oversight over imported pesticides and fertilizers.
- Distribution: marketing limitations and no export.
- High production costs due to the price of fuel.
- Limited and poor irrigation water management.
- Absent or no-longer functioning local agricultural cooperatives.
- Absence of funding and credit system to support farmers.
- Climate change leading to persistent drought.
- Donor policies and different types of projects lack sustainability on long-term.
- Lack of agricultural planning and coordination between different actors.
- Lack of agricultural extension, evidence-based solutions and scientific research.

Needs identified

- Restore food security and income regeneration infrastructure.
- Strengthen small- and mid-scale farming.
- Promote marketing of agricultural products.
- Promote and support the role of women in farming and food processing.
- Identify climate change adaptation opportunities, adapt agrifood value chains to climate change.
- Identify non-climate factors such as conflict and relevant socio-economic drivers that impact on food security.

Needs identified

- Integrate farmers and local knowledge in the interventions of donors, NGOs, local authorities.
- Address lack of agricultural planning and natural resources management due to the absence of a central state authority.
- Conserve local biodiversity, including reforestation.
- Develop local skills and capacity to achieve self-sufficiency in food production.
- Promote capacity building on extension systems; open field stations and schools.
- Provide scientific based evidence to mitigate climate change and food insecurity.

Key sustainability challenges in relation to SDGs	
Food security (SDG2)	Education (SDG4)
Climate change (SDG13)	Gender inequality (SDG5)
Biodiversity loss (SDG15)	Institutional empowerment and peace (SDG16)

Pictures used in this presentation

- **SLIDE 10: Dr** Mirela Barbu and Prof Martin Spinelli receiving the UoS Research with Impact Award for ongoing impact for interdisciplinary collaboration. Photo Gallery: https://staff.sussex.ac.uk/news/article/58164-research-with-impact-awards-celebrate-real-world-impact-of-sussex-research
- **SLIDE 24:** Displaced farmer tents in olive grove in Idleb Governorate, NW Syria. Courtesy photo, Dr Shaher Abdullateef
- **Slide 25:** : Internally displaced livestock breeder in Idleb Governorate, NW Syria. Courtesy photo, Dr Shaher Abdullateef
- **Slide 26:** Fires during the harvesting season in Idleb Governorate, NW Syria. Courtesy photo, Dr Shaher Abdullateef
- **Slide 27:** Displaced farmer tents in olive grove in Idleb Governorate, NW Syria. Courtesy photo, Dr Shaher Abdullateef
- **Slide 30:** SAE expert providing guidance on solar panels to a farmer in Idleb Governorate, NW Syria. Courtesy photo, Dr Shaher Abdullateef
- **Slide 35 (top):** Safflower cultivation in Idleb Governorate, NW Syria. Courtesy photo, Dr Shaher Abdullateef
- **Slide 35 (bottom):** SAE expert providing guidance to wheat farmer in Idleb Governorate, NW Syria. Courtesy photo, Dr Shaher Abdullateef
- **Slide 36:** AVS-related workshops organised by SAE in Idleb and Gaziantep. Courtesy photos, Dr Shaher Abdullateef
- **Slide 37:** Irrigation system damaged during the conflict in Idleb Governorate, NW Syria. Courtesy photo, Dr Shaher Abdullateef

Project Websites:

https://agricultural-voices.sussex.ac.uk/

https://sae-afs.org/ar/agri-voices/

Twitter: @agriculturavox

YouTube Channel:

الخبرات الاكاديمية - Academic Expertise

https://www.youtube.com/channel/UCqIU8l3vOyo_Hxm3nlL2c3g

We are looking forward to your questions!