



**i2connect**  
INTERACTIVE INNOVATION



THIS PROJECT HAS RECEIVED FUNDING FROM  
THE EUROPEAN UNION' HORIZON 2020 RESEARCH  
AND INNOVATION PROGRAMME  
UNDER GRANT AGREEMENT N. 863039

## How to produce informative & low-cost farm videos

Webinar 21.01.2021 2-4 PM  
[Thomas.Alfoeldi@fibl.org](mailto:Thomas.Alfoeldi@fibl.org)



# Content

1. Intro 5'
2. Equipment 10'
3. Planning 10'
4. Filming 10'
5. Editing 10'
6. Additional topics 10'

**Q & A**  
**Your experiences**



Photo: Donausoja/Ina Jaeger



# Why to produce your own video?

- Powerful dissemination tool
- Knowledge of stakeholders
- Increasing the impact of field days etc.
- Equipment is good, simple & inexpensive
- Increased demand in times of COVID !

Photo: Donausoja/Ina Jaeger





# Video applications in agriculture



Films in agriculture: Long history



Practice Innovation



Tutorials



Events



Lecture-style



Explainer videos

**Covid**



Videos in Webinars

**Covid**



Livestream, «Farminar»



Story-telling in PPT

# From clips to videos



Source: Twitter/John Pawsey

# Mentimeter

1. Your Background
2. Your experience with filming & editing



# 3 steps of each video production

## 1 Pre-Production: planning, equipment



## 2 Production: shooting



## 3 Post-Production: editing/dissemination



# Smartphone, VideoCam or PhotoCam?



## Smartphone

- + Cheap, always at hand
- + Picture quality
- + Easy to operate
- External mic needed,
- Image control in sunshine
- No zoom



## VideoCam

From 300 € e.g. Sony HDR-CX625 Full HD

- + Zoom wide/tele
- + Viewfinder for Image control
- + Handling
- Additional costs

Plugs for Mic and headphone!



## PhotoCam

- + picture quality
- Handling needs exercise
- Picture control



# External mic: Crisp sound without wind noise



**Lavalier mic**

20 Euro

<https://www.youtube.com/watch?v=yiWHsfdjHGQ>



**Shotgun mic**

50 Euro

<https://www.youtube.com/watch?v=HWL3mZkUnW8>



**Wireless mic**

160 Euro

<https://www.youtube.com/watch?v=1uTFm-tu41s>

# Stabilize your video



## Rig

20 Euro

<https://www.youtube.com/watch?v=b-eWH-boeXE>



## Gimbal

150 Euro

<https://www.youtube.com/watch?v=AphESb06R8Q>



## Shoulder rig

50 Euro

<https://www.youtube.com/watch?v=yCT9LnpHPJk>



## Tripod with video head

200 Euro

<https://www.youtube.com/watch?v=oFTPxQMdmho>



# Nice-to-have equipment



## Actioncam

e.g. GoPro



## Drone

e.g. DJI Mavic air mini

<https://dronerush.com/international-drone-laws-16520/>



## DJI Osmo Pocket

Compact stabilized handheld cam

<https://www.techradar.com/reviews/dji-osmo-pocket>

# Time for exchange: **Equipment**

Q & A

Your experiences





# Plan your video – tell a story

## Tell the viewer...

- Relevance of the topic
- What will he/she learn

Intro 30“

- Define main key messages and length for each part
- Make chapters

Main Part 90“

- Conclusion
- Call for action
- **Typical on YT:** Comment, subscribe, like, suggest future topics

Outro 30“

# Example: Intro Stubble cultivation

<https://www.youtube.com/watch?v=wsK6U8c5Jso>



Video 1



# Understanding A- and B-roll (footage)



B-Roll



B-Roll



B-Roll



B-Roll



B-Roll



A-Roll  
Interview



A-Roll  
Interview



A-Roll  
Interview



A-Roll  
Interview



A-Roll  
Interview

Intro

Main part

Outro

# Using A- and B-Roll in the editing program

The screenshot displays a video editing software interface. The top right shows a large preview window with a man in a plaid shirt standing in a field of tall green plants. To the left of the preview is a media library grid containing various video clips, some labeled with DJI numbers (e.g., DJI\_0542, DJI\_0543, etc.). Below the media library is a timeline with a multi-track layout. The top track is labeled 'PLAID\_GD\_Tessin\_Oct2018' and shows a video clip. Below it are several tracks labeled 'Clip #28', 'Clip #6', 'Clip #20', and 'Clip #6'. The bottom track is labeled 'A-roll' and shows a sequence of video clips. A blue box labeled 'B-roll' points to the 'Clip #6' track. A green box labeled 'A-roll' points to the bottom track. On the right side of the interface, there are panels for 'Übergänge' (Transitions) and 'Installierte Übergänge' (Installed Transitions), showing various transition effects like '360°', 'Auflösung', 'Bewegungen', etc. The bottom left corner features the 'FiBL' logo.

**B-roll**

**A-roll**

FiBL

i2connect  
INTERACTIVE INNOVATION



# Off-speaker or presenter?

## Advantages

## Disadvantages



Presenter

- efficient
- authentic

- suitable person
- good planning
- no corrections afterwards
- editing time consuming



Speaker

- writing afterwards
- precise formulations

- Less authentic
- writing needs more time

**Combination: Moderator and off-speaker**

# Write an outline

Picture level

Content level

## Video outline Machine Demo (Example)

If you have questions, please contact:  
matthias.klaiss@fibl.org, +41 (0)62 865-7208

- Content level (100 words=1 min)**  
**Intro (What is said?)**
- Explain the problem, relevance, topic, what will be shown in the video
  - Explain where we are (Machine demonstration on weed control)
  - The Relevance: Weed control key factor influencing economic production
  - New technologies and machinery now available

Estimated time for intro: 45 sec

**Main part: Explain your innovation step by step**

- Show all machines presented at the demo-event
- The presenter explains the most relevant particularities of each machine, advantages, disadvantages. Max 45 sec for each machine

Estimated time: 5 minutes

**Outro: recommendations, call for action, statements of farmers.**

Estimated time: 1 minute

## Picture level (What is shown?)

- e.g. presenting farmer, crop, machines
- Show site, overview machinery
  - Introduce presenter
  - Show some selected machinery in action to encourage viewers to continue to watch

e.g. presenter, machines, crop, farmers

- Show each machine in action, different perspectives, interesting details

- Presenter is visible from time to time, especially if he has to explain something directly at a machine, otherwise he speaks in the off to pictures machines in action
- Show participants examining the work of the machine, hands in soil, close ups of soy-

- 1-2 statements of farmers participating at the demo e.g. Which machine suits best on my farm
- Further information



# Time for exchange: **Planning**

Q & A

Your experiences



# Tipps for interview

- Interviewed person (IP): sitting or standing
- Focus on IP and content -> tripod, camera in auto mode
- Always check sound via headphones
- Let IP speak freely
- Keep eye contact, mute, nod
- Ensure relaxed atmosphere, little interruptions
- Ask follow-up questions, let IP repeat if not focussed enough



[Link to tutorial](#) "How to conduct interviews"





# Rule of third



# Cadrage



# Light at the interview





# Shooting B-roll/Footage

- Sufficient footage, min 30 sec, no pan, no zoom!
- Various settings: Long, medium shot, close-ups
- Move camera slowly, avoid zooming



[Link to tutorial](#) "How to create varied footage"



Long shot, establishing



Medium long shot



Close-ups



Close-ups with Action Cam



Close-ups with Tele



Footage

# Time for exchange: **Filming**

Q & A

Your experiences





# Editing software



	Price		Points		
Apple Final Cut Pro X (10.4.4)	330	Mac	82	sehr gut	3/19
Magix Vegas Pro 17	599	PC	82	sehr gut	1/20
Magix Video Pro X (17.0.1.31)	399	PC	79	sehr gut	6/19
CyberLink PowerDirector 18 Ultimate	130	PC	77	sehr gut	6/19
CyberLink PowerDirector 365	70***	PC	76	sehr gut	5/19
Blackmagic DaVinci Resolve Studio 16.2	325	PC/Mac	74	sehr gut	4/20
Corel Pinnacle Studio 23 Ultimate	130	PC	74	sehr gut	1/20
Magix Video Deluxe Premium (19.0.1.18)	129	PC	73	sehr gut	6/19
Magix Vegas Movie Studio 16 Plat.	70	PC	72	gut	1/18
Corel VideoStudio Ultimate 2019	90	PC	65	gut	3/19
Adobe Premiere Pro CC 2018	*	PC/Mac	80	sehr gut	2/18
Blackmagic DaVinci Resolve 12.5 Studio	1077	PC/Mac	76	sehr gut	2/17
Blackmagic DaVinci Resolve 12.5	0	PC/Mac	75	sehr gut	2/17
Adobe Premiere Elements 2018	99	PC/Mac	70	gut	1/18

# Tips for editing

1. Decision: On Smartphone or Computer
2. Choose software (test with free trials)
3. Edit voice track (A-roll) first
4. Place B-roll pictures over audio track
5. Add titles and breaks
6. Use effects very sparingly
7. Add music



[Link to tutorial](#) "How to edit your video"





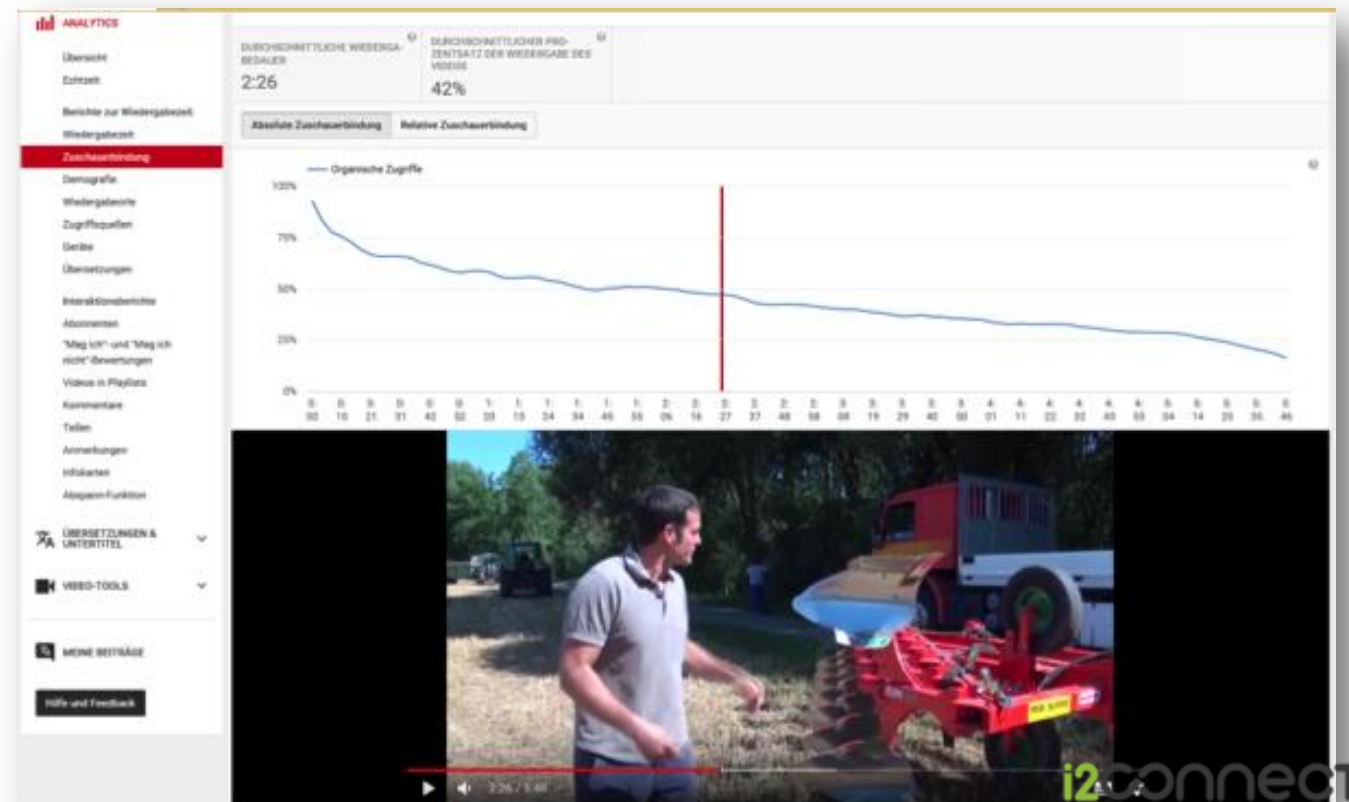
# Ideal length of a video...

... does not exist -> **As short as possible, as long as necessary**

Ideally 2-3 minutes -> **YT-users are quickly lost**

Show rough cut to a friend -> **kill your darlings!**

Rule of thumb: 1 min video -> **100 words (650 characters)**



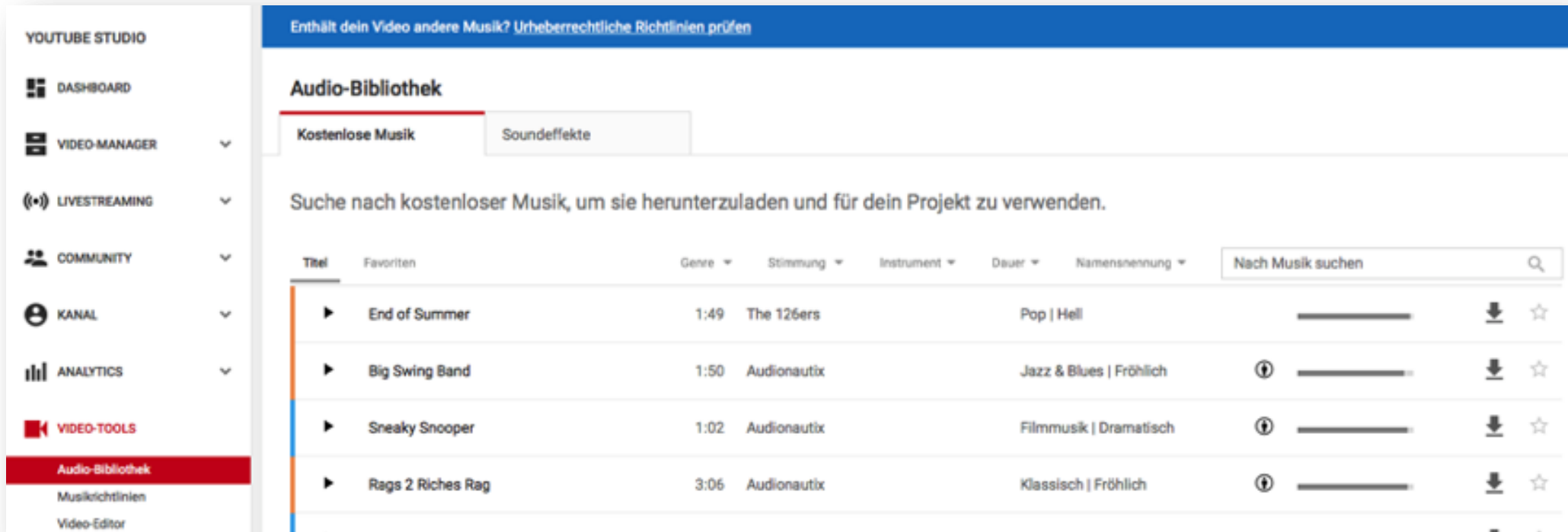
# Use only license-free music

Audio library in YouTube: free of charge

Other music providers:

<https://audiojungle.net> ca. USD 20.-

<https://www.premiumbeat.com> ca. USD 50.-



The screenshot shows the YouTube Studio interface, specifically the 'Audio-Bibliothek' (Audio Library) section. The left sidebar contains navigation options: DASHBOARD, VIDEO-MANAGER, LIVESTREAMING, COMMUNITY, KANAL, ANALYTICS, VIDEO-TOOLS, and Audio-Bibliothek (highlighted). The main content area has a blue header with the text 'Enthält dein Video andere Musik? Urheberrechtliche Richtlinien prüfen'. Below this, the 'Audio-Bibliothek' section is active, with tabs for 'Kostenlose Musik' and 'Soundeffekte'. A search bar is present with the text 'Suche nach kostenloser Musik, um sie herunterzuladen und für dein Projekt zu verwenden.' Below the search bar is a table of music tracks with columns for Titel, Favoriten, Genre, Stimmung, Instrument, Dauer, Namensnennung, and a search bar. The table lists four tracks: 'End of Summer' (1:49, The 126ers, Pop | Hell), 'Big Swing Band' (1:50, Audionautix, Jazz & Blues | Fröhlich), 'Sneaky Snooper' (1:02, Audionautix, Filmmusik | Dramatisch), and 'Rags 2 Riches Rag' (3:06, Audionautix, Klassisch | Fröhlich). Each track has a download icon and a star icon.

Titel	Favoriten	Genre	Stimmung	Instrument	Dauer	Namensnennung	
▶ End of Summer		1:49	The 126ers	Pop   Hell			⬇️ ☆
▶ Big Swing Band		1:50	Audionautix	Jazz & Blues   Fröhlich		ⓘ	⬇️ ☆
▶ Sneaky Snooper		1:02	Audionautix	Filmmusik   Dramatisch		ⓘ	⬇️ ☆
▶ Rags 2 Riches Rag		3:06	Audionautix	Klassisch   Fröhlich		ⓘ	⬇️ ☆



# Time for exchange: Editing

Q & A

Your experiences



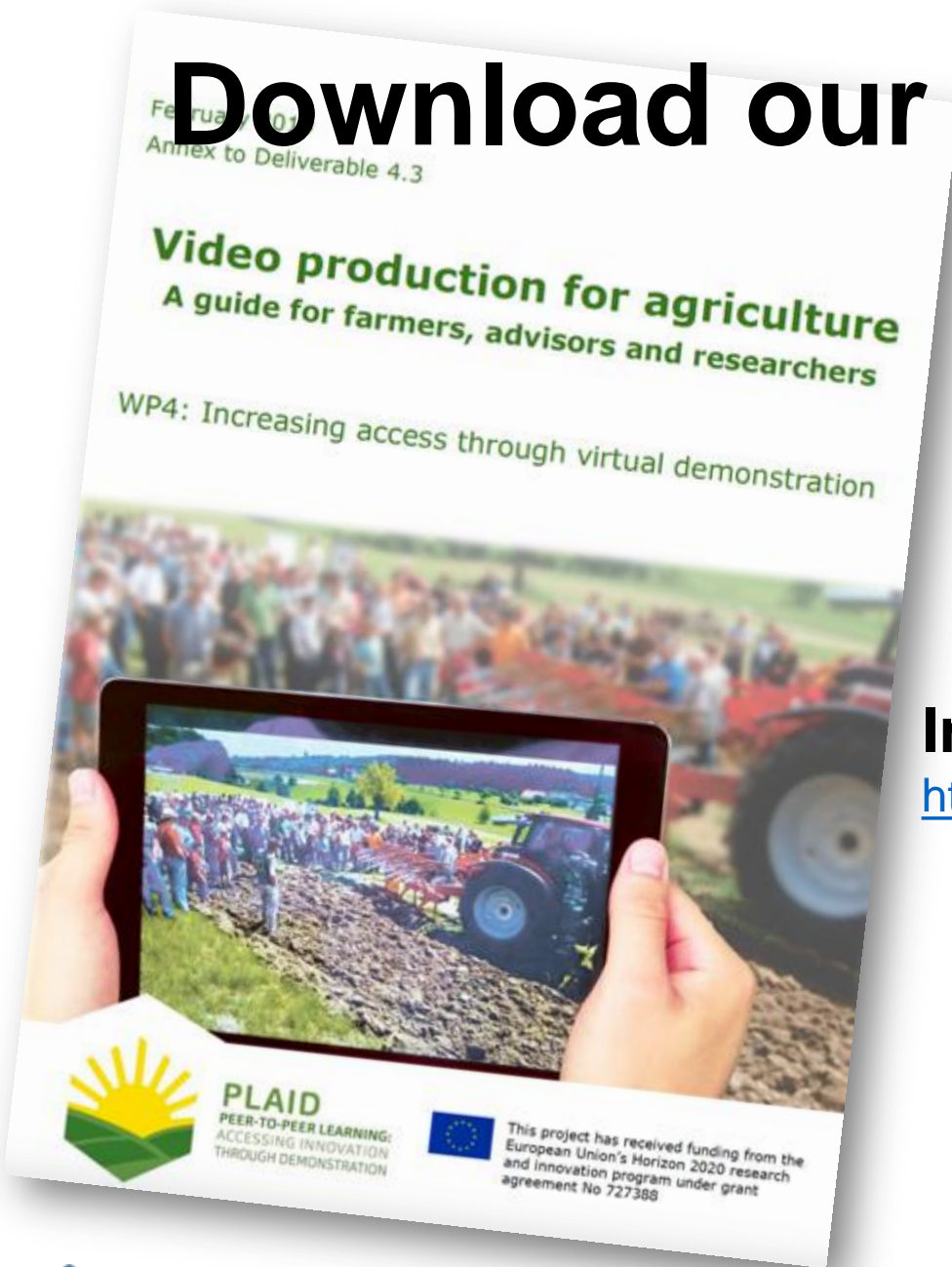
# Summary & recommendations

- **Start with a simple topic suitable for visualisation**
- **Prepare outline with key messages**
- **Select a suitable presenter**
- **Use external microphone and tripod**
- **Shoot enough B-roll/footage**





# Download our video guide



In English, Polish, French, Italian, German, Spanish

<https://farmdemo.eu/hub/app/project-outputs>

# Additional topics

Subtitles /Translations

Animated PPT


Tutorials

Livestream

Explainer videos



# How to add subtitles/translations on YouTube



**Dieter Leibing**  
Biolandwirt und Maschinenbauer

Sichelhacke entwickelt und vorgestellt von Dieter Leibing an den Oekofeldtagen 2019 in Kassel

5.928 Aufrufe • 28.11.2019

**Farm Demo**  
512 Abonnenten

Dieter Leibing – Landwirt und Maschinenbauer – hat vor fünf Jahren seinen Betrieb auf Bio umgestellt. Die gängigen Hackgeräte entsprachen nicht seinen Ansprüchen: Sie waren ihm zu kompliziert, zu verschleißanfällig und zu teuer. So dass ich die Sichelhacke, wie sie hier zu sehen ist, für meinen eigenen Betrieb entwickelt habe. In diesem Video zeige ich euch, wie die Maschine aufgebaut ist und wie sie funktioniert. Die Sichelhacke vorgestellt von Dieter Leibing an den Oekofeldtagen 2019

Druckversion | Das ist ein Video von Dieter Leibing

Deutsch ▾

Nächste Titel

Maschinendemo: Mechanische Unkrautregulierung in Soja  
FIBL Film  
10.450 Aufrufe • vor 1 Jahr

Maschinendemo: Unkrautregulierung im...  
bauernfilme  
1.895 Aufrufe • vor 7 Jahren

Melden

Transkript öffnen

Übersetzungen hinzufügen

# Title, description and tags on YouTube

Studio

Auf deinem Kanal suchen

Inhalte des Kanals

Video

Désherbage mécanique - Démonstration...

Details

Analytics

Editor

Kommentare

Untertitel

Videodetails

Standard Weitere Optionen

ÄNDERUNGEN RÜCKGÄNGIG MACHEN SPEICHERN

Titel (erforderlich)





Désherbage mécanique - Démonstration de herse étrilles et bineuses

Beschreibung

Aux « Werktuigendagen » à Oudenaarde, à l'ouest de la Flandre, Inagro a organisé une démonstration de désherbage mécanique. En agriculture biologique, les machines sont en fort développement, les outils deviennent de plus en plus performants. Dans cette vidéo, Lieven Delanote présente des herse-étrilles et bineuses suivantes :  
Treffler  
Garford Inrow  
Monosem  
Kongsilde Vibro Crop Intelli  
Carré econet  
Garford robocrop  
Steketee IC Light  
APV Kruse  
Carré  
Einboek Adrostar rotation

Thumbnail

Du kannst ein Bild auswählen oder hochladen, das den Fans zeigt, was in deinem Video passiert. Ein gutes Thumbnail fällt auf und erzeugt Interesse bei den Zuschauern. [Weitere Informationen](#)



Zielgruppe

Wurde dieses Video speziell für Kinder erstellt?

Unabhängig von deinem Standort gelten die Bestimmungen des US-Gesetzes zum Schutz der Privatsphäre von Kindern im Internet (Children's Online Privacy Protection Act, COPPA) und/oder anderer Gesetze. Du musst angeben, ob deine Videos speziell für Kinder erstellt wurden. [Informationen dazu, welche Inhalte als "speziell für Kinder" gelten.](#)

☐ Ja, es ist speziell für Kinder

☒ Nein, es ist nicht speziell für Kinder


Altersbeschränkung (erweitert)

Tags

yt:cc=on machine demonstration organic farming mechanical weed control herbicide free weed control agriculture

Wenn du mehrere Werte eingibst, trenne sie jeweils durch ein Komma

Video



Video

<https://youtu.be/KrmmLRuA9MxQ>

00:00 / 10:04

MachineDemo\_kurz\_Weeding 1.mov

Videoqualität

4K HD

Sichtbarkeit

Öffentlich

Playlists

5 Playlists

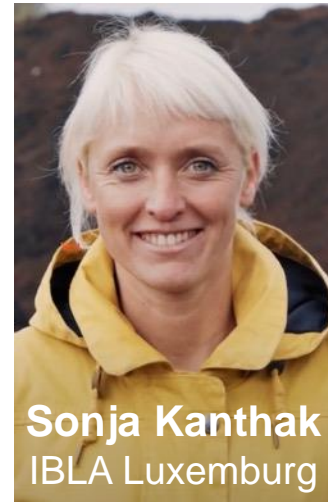
Abspann

Infokarten

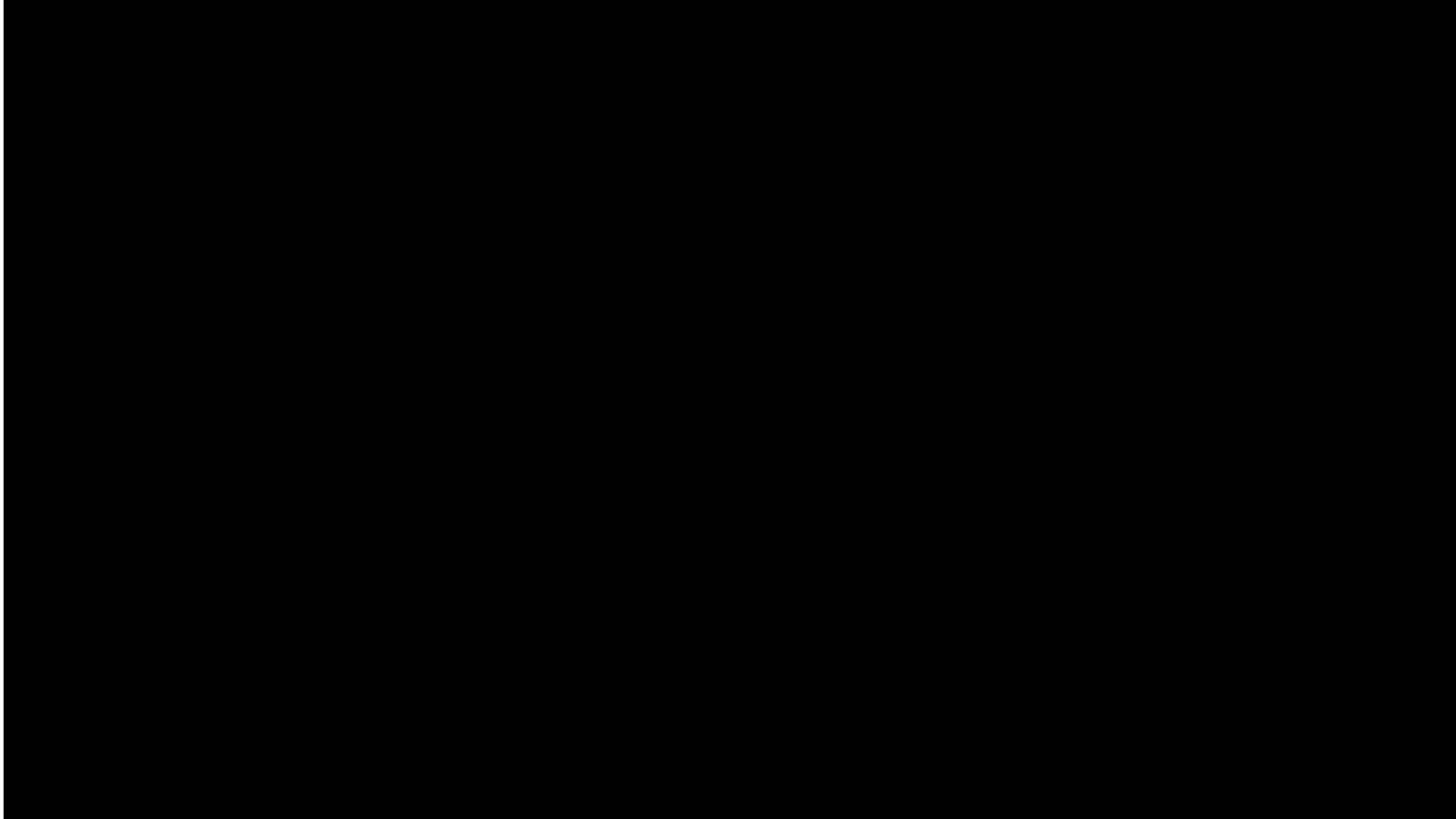


# Creating an animated Slideshow as video in PPT

The screenshot shows a PowerPoint presentation in progress. The main slide is titled 'i2connect INTERACTIVE INNOVATION presents Agroforst for feed a How to use trees and forests in a'. The background is a photograph of a herd of white goats grazing in a lush green field with trees. The text 'i2connect' is prominently displayed in large white letters, with 'INTERACTIVE INNOVATION' in smaller green letters below it. The word 'presents' is in a small, light green font. The main title 'Agroforst for feed a' is in large white letters, and the subtitle 'How to use trees and forests in a' is in smaller white letters below it. The PowerPoint interface includes a ribbon with tabs like 'Start', 'Einfügen', 'Entwurf', 'Übergänge', 'Animationen', 'Bildschirmpräsentation', 'Überprüfen', and 'Ansicht'. The 'Animationen' tab is active, showing a list of animations on the right side. The status bar at the bottom indicates 'Folie 1 von 12' and 'Englisch (Vereinigtes Königreich)'.

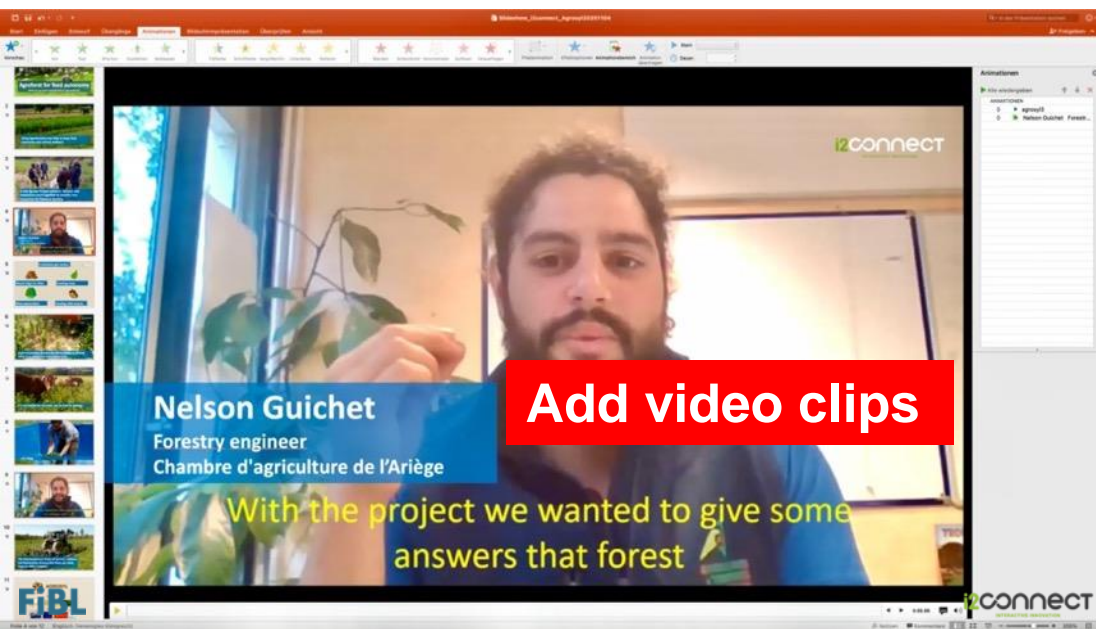
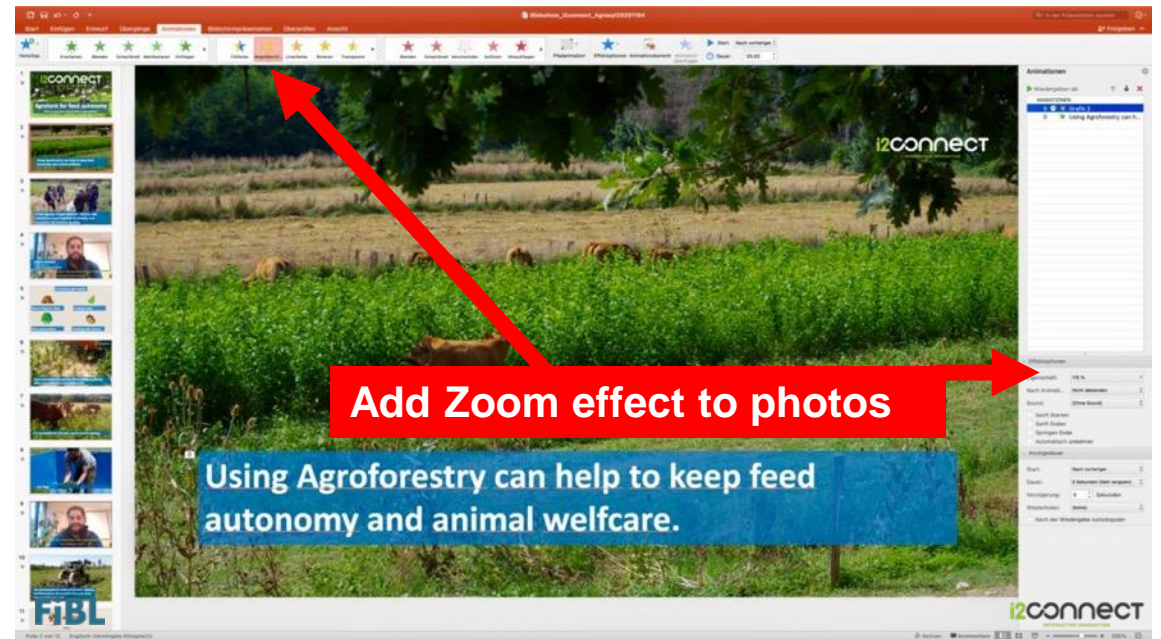
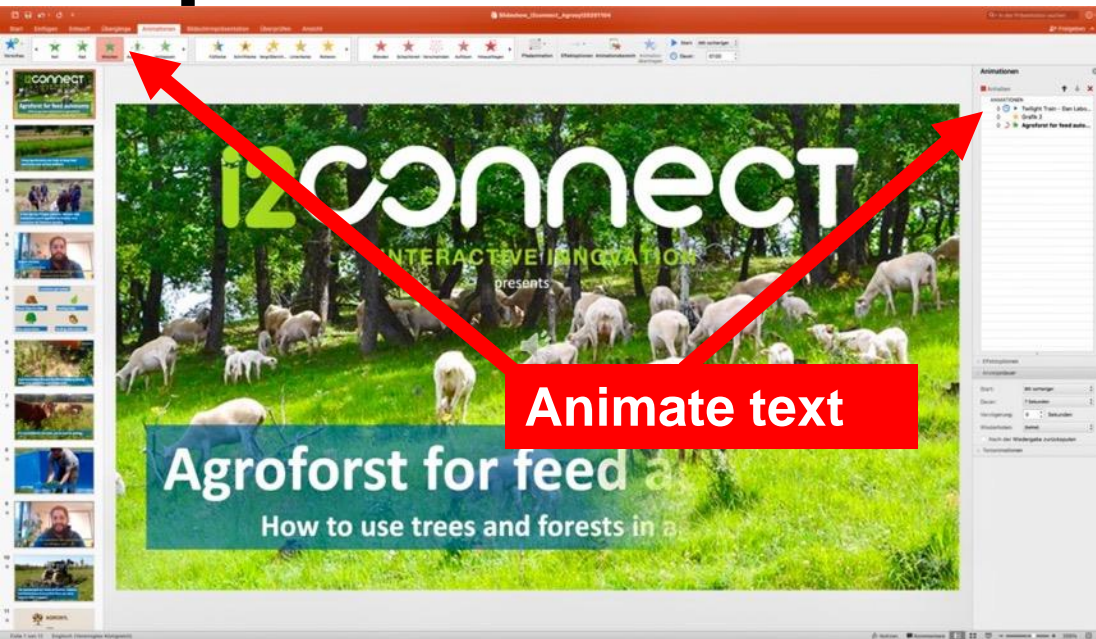


# Creating an animated Slideshow as video in PPT





# Tips for animated PPT



**Add voice-over** with text-to-speech software  
e.g. Amazon polly or register your own voice

**Save PPT: as movie file**

# Creating an animated Slideshow as video in PPT

Example: <https://youtu.be/8kv85NhNdtI>

Video 2



presents



# Tutorial style

- For more complex content
- Good planning of content and visualisation
- Green screen technique, lamps not needed
- Use beamer, teleprompter app, or cards to remember text



# Example: Tutorial style



[https://www.youtube.com/watch?v=nIGW8FkNdU0&feature=emb\\_title](https://www.youtube.com/watch?v=nIGW8FkNdU0&feature=emb_title)



# Livestream

- Smartphone, bluetooth headset with microphone, mobile router
- **Via YouTube:** + picture quality; - time latency (30 sec); - interaction via chat
- **Via Zoom:** - picture quality; + no time latency; + chat or live audio interaction



# Example: Tofu-making course





# Filming at conferences, project meetings

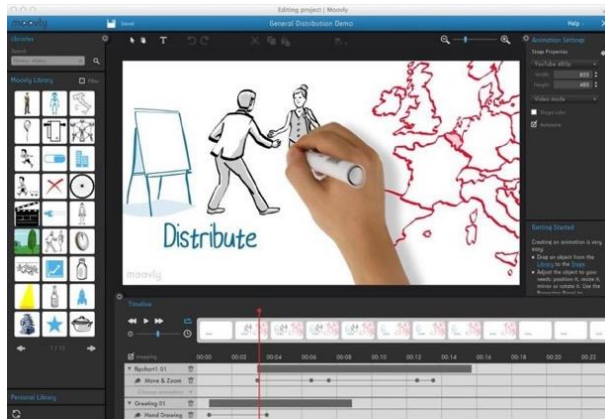
- Overview or selected topics
- Footage: Speakers, audiences etc.
- Footage: Photos, PPT, videoclips from interviewed partner



# Explainer videos

- For complex topics
- Fast and not expensive
- Good storyboard needed
- They all look similar...

Grassland Carbon Sequestration



Link to different programs

<https://www.wowmakers.com/blog/explainer-video-software/>



**Thanks for your participation  
and all the best with your own farm videos!**

