

SEED WARRIORS

A film by Mirjam von Arx and Katharina von Flotow

Co-Produced by ZDF / ARTE and SF

Developed with the support of the MEDIA Programme of the European Community

1. Synopsis

In the remote Norwegian town of Longyearbyen, just 1000 kilometres from the North Pole, politicians from around the world came to celebrate the opening of the world's first global seed bank. After years of difficult negotiations and searching for the right spot, this was deemed to be the safest place on earth. Eventually, 4,5 million seed samples will be stored in this "Doomsday Vault" and ensure the continued existence of biodiversity.

But is the dream of global food security achievable? By 2050 temperatures worldwide are expected to rise by at least 2 degrees. This will result in a drop in food production by up to 30 per cent in some regions. By this time global food demand will have doubled. How will we feed the world?

In SEED WARRIORS we hear from the scientists behind this ambitious project and examine the reality of the fight against hunger.

In Kenya, where drought is a recurring problem, we meet *Zachary Muthamia*, the director of the National Seed Bank, who is using the limited resources available to him to preserve his country's existing biodiversity and send copies of Kenya's unique plant heritage to Norway before his energy eating generators die for good. And we meet *Marianne Bänziger*, one of the world's leading experts on maize. She's using the same biodiversity to develop non-genetically modified seeds that yield 20 to 30 percent more than existing seeds and thrive in conditions of drought. But time is running out.

The two Kenyan-based scientists are part of a pioneering group of environmentalists and agriculturalists who are all working in their own fields to achieve their shared goal of global food security:

- *David Battisti*, a passionate climatologist with a global outlook from the University of Washington, USA
- *David Lobell*, a renowned agriculturist studying the effects of climate change on agriculture, from Stanford University, USA
- *Cary Fowler*, the initiator of the Svalbard Vault and Executive Director of the Global Crop Diversity Trust, Rome
- *Wangari Maathai*, Nobel Peace Prize Winner and political activist, Nairobi, Kenya
- *Ola Westengen*, co-ordinator of the Svalbard Global Seed Vault, Norway

Our protagonists come from a range of disciplines but they all face innumerable hurdles – bureaucracy, a lack of money and resources, the absence of political will. These unlikely heroes, have all made considerable sacrifices and have proved resilient in the face of adversity.

Will the Svalbard Global Seed Bank bring our SEED WARRIORS a step closer to their goal of global food security?

2. Protagonists

The SEED WARRIORS provide valuable services in the field of food security thanks to their own initiative and engagement and because they are in dialogue with each other, beyond national and scientific borders in order to find unconventional solutions. They are:

- *Marianne Bänziger*, the world's leading maize specialist and a visionary scientist, born in Switzerland and based in Nairobi
- *Zachary Muthamia*, the Kenyan seed bank director, Nairobi
- *Cary Fowler*, the initiator of the Svalbard Vault and Exec. Director of the Global Crop Diversity Trust, Rome
- *David Battisti*, a passionate climatologist with a global outlook, University of Washington, USA
- *David Lobell*, a renowned agriculturist studying the affect of climate change on agriculture, Stanford University, USA
- *Wangari Maathai*, Nobel Peace Priz Winner and political activist, Nairobi
- *Ola Westengen*, coordinator of the management of the Svalbard Global Seed Vault, Norway



Ola Westengen labeling seed boxes shipped from all over the world to be deposited in the Global Seed Vault in Norway.

Our protagonists represent the fields of politics, research and “archiving of our cultural heritage.” They are the carriers of hope whose mettle is put to the test again and again (whether by bureaucratic hurdles, money shortages, or political problems) and who take significant personal sacrifice in stride. They are not typical heroes, neither in appearance nor in manner, but they are tough, headstrong and in spite of everything, have not lost their sense of humor. We want to bring them and their concerns closer to the public and provide enough space to meet with them on different levels, including a private one, to make clear why they in particular are so dedicated to the cause.



Scientist Marianne Bänziger shows David Lobell from Stanford University around her testfarm in Kiboko, Kenya.

3. Film Facts

<i>Genre:</i>	Creative feature documentary
<i>Length:</i>	86' / 52' (TV version)
<i>Country of origin:</i>	Switzerland
<i>Shooting format:</i>	HD, 16:9
<i>Language:</i>	English, Swahili, Swiss German
<i>Producer & Co-Director:</i>	Mirjam von Arx
<i>Author & Co-Director:</i>	Katharina von Flotow
<i>Camera:</i>	Elia Lyssy
<i>Editor:</i>	Janet McCaig Taylor
<i>Sound:</i>	Marc von Stürler
<i>Music:</i>	Adrian Frutiger, Fabian Sturzenegger
<i>In co-production with:</i>	ZDF / ARTE (DE/FR), Swiss Television SF (CH)
<i>Other film funders:</i>	Zurich Film Foundation, George Foundation, Fonds National, Migros Kulturprozent Developed with the support of the MEDIA Programme of the European Community
<i>Distributed by:</i>	Praesens-Film AG (Switzerland, Liechtenstein)
<i>Production company:</i>	ican films gmbh Lagerstrasse 101 8004 Zürich Switzerland mirjam@ican-films.com



Svalbard, 78° North, -30°C

4. Filmographies

4.1. Filmography of Producer and Director Mirjam von Arx

2008 – 2011 **Producer/ Director of the cinema documentary**
SNOW WHITE & RED ROSE – A FAIRY TALE ABOUT THE VIRGIN MYTH

HD / 35mm, 100' / 52'

Produced by: ican films gmbh

2007 – 2009 **Producer / Co-Director of the cinema documentary**
SEED WARRIORS

HD / 35mm, 90' / 52'

Produced by: ican films gmbh, in co-production with ZDF / ARTE, SF and developed with the support of the MEDIA Programme of the European Community

Theatrical Release Switzerland: Praesens-Film AG

2006 – 2007 **Producer of the cinema documentary**
SEVEN DUMPSTERS AND A CORPSE

DV / Super 8mm, 81'

Nominated for the Swiss Film Award 2008

Winner of the Zurich Film Award 2007

Winner of the Audience Award, Duisburger Filmwoche 2007

Produced by: ican films gmbh

Theatrical Release Switzerland: Frenetic Films, Zurich

Theatrical Release Germany: Neue Visionen, Berlin

Theatrical Release Austria: Filmladen, Vienna

Broadcasters: SF 1, 3Sat, SBS Australia, YES Israel, CBC Canada

Festivals:

HotDocs 2007, Toronto, Canada

Int. Film Festival Locarno (Appellations Suisse)

Filmfest Hamburg 2007, Germany

Duisburger Filmwoche 2007

24. Kasseler Dokumentarfilm- und Videofest, 2007

2000 – 2005 **Director and Exec. Poducer of the cinema documentary**
BUILDING THE GHERKIN

Digibeta / 35mm, 89' / 52'

World rights: ican films gmbh

Produced by: Condor Communications / ican films gmbh

Theatrical Release: Switzerland, Germany, UK

Broadcasters:

Swiss TV, Sky Artsworld, ABC Australia, MICO/NHK Japan, NRK Norway, Arts Channel New Zealand, Taiwan Public Television, 3sat, Fox Int.

Festivals/Awards: Int. Documentary Film Festival 2005, Munich, Germany

Art Doc FEST, May 2005, Rome, Italy

CPH:DOX, Kopenhagen, Nov. 2005

22. Kasseler Dokumentarfilm- und Videofest, 2005

24e Festival Int. du Film sur l'Art, Montréal, Canada, 2006

(Winner FIFA Award 2006)

2002 – 2003 **Director of the cinema documentary**
ABXANG

Super 16mm/ DVCam, 102'

Produced by: ican films gmbh

Theatrical Release: Switzerland

Broadcasters: Swiss TV, Teleclub, 3Sat

1997 **Director / Producer of the TV documentary**
SHOOTING STARS

Betacam SP, 28'

Produced by: Mirjam von Arx, Swiss TV

Broadcasters: Swiss TV

1997 **Production manager / interviewer of the TV documentary**

MUMMENSCHANZ - THE MOVIE

Super 16mm, 60'

Produced by: Lotus Films, Switzerland

Broadcasters: TSI (Televisione Svizzera Italiana)

1996 **Co-director / co-producer of the TV documentary**

MOLE PEOPLE

Betacam SP, 25'

Produced by: Tele Bremen, Germany

Broadcasters: "24 Stunden" on SAT1

1992 **Producer of the TV documentary**

BLUESIANA

Betacam SP, 68'

Produced by: Mirjam von Arx

Broadcasters: Swiss Television, TELECLUB, 3sat, Czech TV

4.2. Filmography of Author and Co-Director Katharina von Flotow

1996 to 2003: Head of Culture and Documentary Department, European Broadcasting Union, Coordination of production and distribution of European co-productions in the field of culture and documentary

Executive production :

- Eurovision Competition for Young Musicians & Young Dancers (24 broadcaster co-pro), Lisbon 1996, Gdansk 1997, Vienna 1998, Bergen 2000, London 2001, Berlin 2002
- EBU Jazz Night (7 broadcasters co-production), Den Hague 1997
- EBU World Music Night (8 broadcasters co-pro), Amsterdam 1998
- 24 hours Bach (11 broadcasters co-production), 2000
- European World Music - documentary series 6 x 52', 2000-2003
- Sports and Big Business documentary co-production (Banff Rockie Award 2001)
- Fortress Europe documentary co-production (FIPA Gold 2002)

2004 Established Flotow Productions Sarl, Geneva CH – productions for cinema and television.

2004 Dance Celebration

Associate producer – in collaboration with Penelope Films, PARIS
Commissioned by ARTE France, Maison de la Danse, Lyon.
Live broadcast November 2004. (Co-production - 7 European broadcasters)

2005 AFRICA LIVE

Associate producer - in collaboration with Antelope Films, BBC, ARTE, DRS,YLE,NRK, SVT, NPS, ETV, PBS. Live music festival in Dakar Senegal, bringing together 15 of Africa's best musical groups: Youssou N'Dour, Salif Keita, Angelique Kidjo. Delivery of international music and malaria messaging documentary. In collaboration with WHO, UNDP and the UN Foundation.

2005/6 Surviving the Battles

Executive producer
Production company - Ottonia GmbH, Leipzig : 4 part documentary series of four important historical battles. For MDR; SFB; WDR; ARTE.

2005/6 HITLER'S MUSEUM – The secret history of organized art theft

Co-author and executive producer
2 x 52 international documentary for ARTE, AVRO, TSR, YLE, SBS, ORF, Discovery Germany, History Canada.

2007/8 DARWIN'S LOST PARADISE

Co-author with Jan Lorenzen
Co-director with Hannes Schuler
Co-production MONACO FILMS; Hamburg, Films à Trois, France, Chapman Pictures Australia
Commissioned by: ARTE France and SBS Australia

2008/9 BIKINI REVOLUTION

Associate producer
Production company GRIFA; Sao Paolo, Brazil
Commissioned by: ARTE Germany,
Pre-sales: TSR, AVRO, YLE; TV Catalonia, SBS, IBA (ongoing)

2008/9 SEED WARRIORS

Author, Co-Director
Production: ican films gmbh, Zurich
For ZDF / ARTE, SF

4.3 Filmography of Production Company ican films

Founded: 5 November 2002
Based: Lagerstrasse 101, 8004 Zürich
Managing Director: Mirjam von Arx

2011 „Snow White & Rose Red – A Fairy Tale about the Virgin Myth”

Director: Mirjam von Arx
HD/35mm, 100' / 52'

2009 „Seed Warriors”

Director: Mirjam von Arx / Katharina von Flotow
Developed with the support of the MEDIA Programme of the European Community
HD/35mm, 90' / 52'
Theatrical: Switzerland (Distributed by: Praesens-Film AG)
TV: ZDF / ARTE, SF

2007 „Seven Dumpsters and a Corpse“, produced by ican films gmbh,

Director: Thomas Haemmerli
DV / Super 8mm, 81'
Festivals: HotDocs 2007, Toronto, Int. Film Festival Locarno (Appellations Suisse),
FilmFest Hamburg, Filmwoche Duisburg, Kasseler Dokumentarfilm- und
Videofest
Theatrical: Switzerland (Distributed by: Frenetic Films)
Germany (Distributed by: Neue Visionen)
Austria (Distributed by: Filmladen)
TV: SF1, 3Sat, SBS Australia, CBC Canada, YES Israel
Awards: Nominated for Swiss Film Award 2008
Zurich Film Award 2007
Audience Award Duisburger Filmwoche 2007

2005 „Building the Gherkin“, co-produced by ican films gmbh,

Director / Exec. Producer: Mirjam von Arx
Digibeta / 35mm, 89' / 52'
Festivals: Int. Documentary Film Festival 2005, Munich, Germany
(*Selection*) Art DocFEST, May 2005, Rome, Italy
CPH:DOX, Copenhagen, Nov. 2005
22. Kasseler Documentary- and Video Fest, Nov. 2005
24e Festival Int. du Film sur l'Art, Montréal, Canada, March 2006
(Award for the “Best Reportage”)
Theatrical: Switzerland (Distributed by: ican films gmbh)
Germany (Distributed by: GMfilms)
London, U.K. (Barbican)
TV: SF1, 3Sat, Sky Artsworld, ABC Australia, MICO/NHK Japan, NRK Norwegen,
Arts Channel Neuseeland, Public TV Taiwan, Czech TV, Fox Int. Italien

2005 „Roger Federer – Replay“, co-produced by ican films gmbh

Director: Christian Neu
HDcam: 52'
DVD: Distributed by Warner Bros.

2003 „abXang“, produced by ican films gmbh

Director: Mirjam von Arx
Super 16mm / DVCam, 102'
Theatrical: Switzerland (Distributed by: Filmcoopi)
TV: SF
Teleclub
3Sat