

# Tackling Poverty in Niger

Launching The Dov Pasternak  
Horticultural Training Center







**We start with the  
end in mind**

For 15 years Eliminate Poverty NOW (EPN) has been empowering Africa's extreme poor, especially women and girls, to lift themselves out of poverty.

In rural areas, **maximizing farmer income** is the key. Increased income improves family diets, clothing, and housing; increases access to education and healthcare; and upgrades overall quality of life.







**No country on earth  
poses greater  
challenges to  
reducing extreme  
poverty than Niger**

**Niger ranks dead last on the UN 2020 Human Development Index:**

- 80% of Nigeriens are subsistence farmers growing rainfed crops
- 65% of Nigeriens are illiterate
- 40% of Nigerien children suffer from malnutrition

**UNICEF labeled Niger “the world’s most underfunded humanitarian crisis”**

**While Niger is an extreme example, the Sahel has tens of millions of subsistence farmers struggling to survive.**



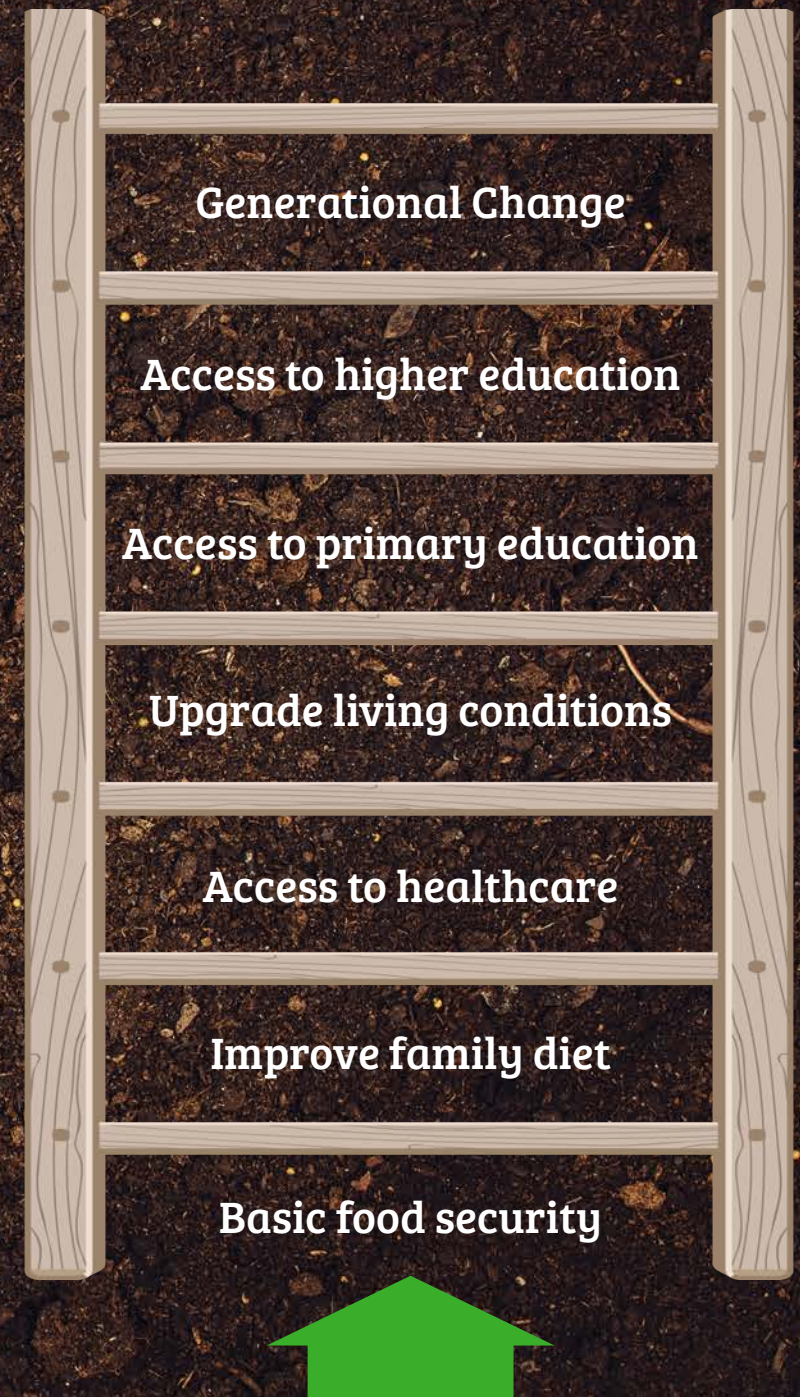


# It's hard to climb the ladder of economic opportunity when you can't reach the first rung!

Improved yields of rainfed crops is  
a critical first step

*But for sustained change...*

Farmers need the ability to  
generate meaningful income and  
break the cycle of poverty





# In the Sahel, irrigation is key to unlocking economic potential

These two photos were taken from the identical spot, one looking back towards a local village in Niger, the other facing the village's irrigated vegetable garden.



Outskirts of Izawitan village, Balleyara Niger



Farmers of the Future cooperative garden at Izawitan



**Many development programs improve food security but generate minimal/modest income gains. Our “Farmers of the Future” model creates income that changes lives.**

Project	Principal Crop(s)	Percent or Absolute Increase in Yield	Annual Income Increase per person
One Acre Fund <sup>1</sup>	Maize	+274–490 kg/acre	\$30–91
Nuru Int’l Kenya <sup>2</sup>	Mixed grains and Dairy	98%	\$235–400
Millennium Villages Project <sup>3</sup>	Maize	187%	minimal
<b>Farmers of the Future - Izawitan<sup>4</sup></b>	<b>6–10 vegetable varieties</b>	<b>New activity</b>	<b>\$755</b>
<b>Farmers of the Future - Sadoré<sup>4</sup></b>	<b>Fruit trees</b>	<b>New Activity</b>	<b>\$2,000+</b>

Data Sources:

1. One Acre Fund randomized control study results in Kenya: Chwele District 2009, Busia District 2014, Teso District 2017
2. Nuru Kenya Impact Report, University of Texas, Feb. 2020
3. Harvests of Development in Rural Africa: The Millennium Villages Project After Three Years
4. Farmers of the Future Internal M&E Studies: Sadoré Report 2013, Balleyara Report 2019. FOF project overview provided in the appendix.





**Farming for income  
requires major  
change**



Three potatoes are shown at the top right, and three carrots are shown at the bottom left of the right-hand panel.



**Different Goals**

Grow crops for sale that maximize income



**Different Methods**

Irrigate to utilize the land year-round



**Different Crops**

6–10 high value crops vs 1–2 rainfed grains

**The Dov Center**  
ALFAREY MA ZAADA  
CREATING FARMER PROSPERITY







**The greater the  
change, the more  
training required**

Completing 1 cycle of year-round agriculture  
takes 12 months

Our Farmers of the Future model provides  
farmers 3+ years of intensive training and  
supervision to master new concepts and  
techniques

A multi-year commitment to intensive training  
is the critical missing ingredient to agricultural  
transformation in Niger

**But the technicians to conduct this training are  
in desperately short supply**



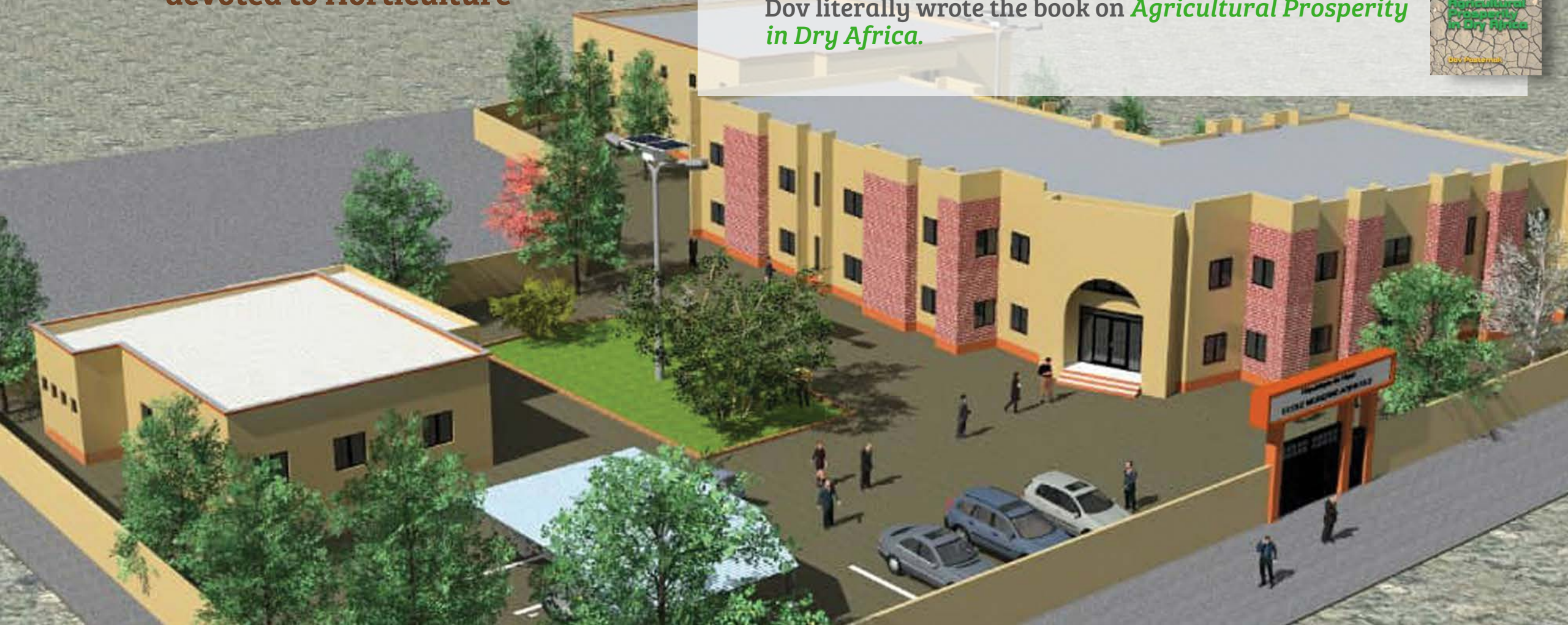
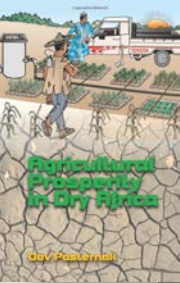
# Introducing The Dov Center

Niger's first ever Center of Excellence  
devoted to Horticulture

Teaching farming methods that generate \$1,000 per year of income, **double** the average income of Niger.

Building on Professor Dov Pasternak's <sup>z"l</sup> 15 years of experience improving livelihoods in Niger and 50 years of global experience in dryland agriculture.

Dov literally wrote the book on *Agricultural Prosperity in Dry Africa*.





A photograph of three people in a garden. On the left, a man in a white long-sleeved shirt and trousers is gesturing with his right hand. In the center, a woman wearing a wide-brimmed hat and a blue apron over a white shirt is looking towards the man. On the right, another man in a dark blue jacket and sunglasses is looking at the plants. They are standing in a garden with rows of green leafy plants and some taller, thin-stemmed plants in the background.

# The Dov Center brings important firsts to Niger

The training gardens at The Dov Center  
are already operational.

Niger's first ever training center  
devoted to horticulture


Teaching concepts and techniques to  
dramatically increase farmer income

Drawing on innovation from:


- Israeli technology and experience,
- 15 years research on preferred income-generating crops specific to the Sahel, and
- 10 years experience creating a practical, proven model for rural economic transformation.







**The Dov Center will  
“train the trainers”  
to teach concepts  
and techniques that  
dramatically  
increase income**



The Center features a rigorous, hands-on training program for technicians including:

- Best practices in horticulture,
- Creative strategies to maximize income,
- Principles of running effective for-profit cooperatives, and
- Tools and techniques to transfer knowledge to largely illiterate farmers.

The Center will also offer seminars and consulting services to funders and practitioners of development projects.



# Projected Impact: The multiplier effect of training the trainers.

## Center will graduate 40 technicians per year

- Students will be recruited from 50,000 high school graduates
- Job placement with NGOs, the private sector, government, etc. upon graduation

## One technician can impact 1,500 lives

- 1 technician can support 5 villages
- An average village cooperative has 50 farmers
- The average household size in Niger is 6

## In 5 years The Dov Center can improve 300,000 lives

- In 5 years of full operation, The Dov Center will graduate 200 technicians
- 200 technicians x 1,500 family members
- The income generated will change the lives of this generation and the next

1  
TECHNICIAN  
**250**  
FARMERS

40  
TECHNICIANS  
**10k**  
FARMERS

200  
TECHNICIANS  
**50k**  
FARMERS

IN 5 YEARS  
**300k**  
OUT OF POVERTY



# Measuring Success

## Student Recruitment

Recruitment and graduation of students, with a goal of 40 per year completing the two-year training program.

## Technician Placement

Rate of placement and employment of graduates in jobs which enable them to use their skills and knowledge.

## Villages and Farmers Served

Numbers of villages and smallholder farmers reached and results of these engagements over a three-year period.





# Scaling the Impact

## Committed Partners will take us to scale in Niger

ICRISAT (International  
Crops Research in the  
Semi-Arid Tropics),  
Niger

Songhai Center, Benin

Volcani International  
Partners, Israel

University of Niamey  
Agronomy  
Department, Niger

## Becomes self-funding in 5 years so its impact continues to grow

4 income streams:

- Student tuition
- Seminar fees
- Farm produce
- Consulting services

Additional sources being  
developed

## Long Term Impacts

Beyond Year 5, the Center  
will train hundreds of  
additional technicians  
improving hundreds of  
thousands more lives.

The model can be  
replicated in other  
countries throughout  
the Sahel.





# The EPN International Team



**John Craig**

President  
Eliminate  
Poverty NOW  
USA



**Robin Mednick**

President  
Pencils 4 Kids  
Canada



**Hamani Djibo**

President  
ONG LIBO  
Niger



**Issaka Housseini**

Technical Director  
ONG LIBO  
Niger



**Joanne Moore**

EPN Board of  
Directors  
Israel



# Budget and Financing

(in US dollars)

<b>The Budget: \$1.5M</b>	<b><u>In \$ 000's</u></b>
Land, Site Prep, Utilities	\$250
Academic/Administrative Hall	260
Cafeteria	70
Dormitory	160
Furniture & Equipment	115
Training Gardens	70
Seminar Room	50
Operating Costs:	
Scholarships	150
Cumulative Operating Deficit	175
Administrative Costs	125
Other Misc.	<u>75</u>
<b>TOTAL</b>	<b>\$1,500</b>

<b>Financing: \$900K raised to date</b>	<b><u>In \$ 000's</u></b>
Individuals	\$200
Family Foundations	450
EPN Board	250
Funds to be Raised	<u>600</u>
<b>TOTAL</b>	<b>\$1,500</b>





# More About Professor Dov Pasternak (1940–2018)



- World expert in dryland agriculture
- Awarded World Chair in Desertification from UNESCO and Lifetime Achievement Award from Society for International Development, Israel
- 30 years at Ben Gurion University; 20 years heading BGU's Institute for Agricultural and Applied Biology
- Consulted in 24 countries
- Wrote or co-authored hundreds of research papers
- 18 years working and consulting in the African Sahel; 10 years in Niger as Chief Scientist for Crop and Technology Diversification at ICRISAT (International Crop Research in the Semi-Arid Tropics)
- Visionary and leader of the Farmers of the Future project for rural economic transformation
- Author of *Agricultural Prosperity in Dry Africa*



# More About Farmers of the Future - a Model for Rural Economic Transformation



FARMERS  
OF THE  
FUTURE

*For a better future*

**Goal:** Enable women farmers to earn up to \$1,000/year — **twice** the average income of Niger

**Financial structure:** Upfront subsidy transitioning to financially self-supporting businesses

## **The Model:**

- Organize women into local cooperatives
- Design gardens/nurseries to achieve desired economies of scale collectively and individually
- Provide free of charge: Infrastructure, initial agricultural inputs, **3+ years training and supervision**
- Initiate forced savings program (cooperative dues) with the first harvest
- Teach intensive, market-based farming techniques:
  - Grow crops 12 months of the year
  - Identify 6-10 high value vegetables and fruits
  - Grow counter-seasonally and store post-harvest for maximum income

**Current Implementation:** 10 villages in Niger



# Farmers of the Future

## Case Study: Sadoré Niger



Sadoré coop tree nursery. Coop members used to call Dov “Father of the Poor.” Now they call him “Father of the Rich!”

A traditional rural village and first FOF pilot site

In 2007, 35 women were organized into a cooperative; given a small tree nursery, vegetable garden, and intensive training

Results from an FOF internal study 6 years later:

- 32 women remained in the cooperative
- Coop tree nursery had expanded to 20,000 trees (commercial value of \$40,000)
- Each member also had a private tree nursery at home

**Estimated income per member: \$2,000+  
(4X Niger’s average annual income)**

Use of funds:

- All homes improved; many electrified
- 100 children attended secondary school (none prior)
- 7 students enrolled in university
- Women were well dressed; most wearing jewelry; many with cell phones