

# 7 Steps to Make a Living on a Small Farm

By The Dutch Farmer



#### INTRODUCTION

Escape the 9-5 and start a small farm that will allow you to live the life you want. Work on your own terms, make your own hours, and make a comfortable to good living in the process.

Seems too far-fetched? There are countless of good examples in the world of small scale agriculture of people making a viable and good living on a small acreage growing high intensity vegetables and crops for profit.

I've seen people from all sorts of life do it over and over again.

To get started, you don't need a background in agriculture, have an agricultural degree, or have been raised on a farm.

With a relatively small initial investment, and some of your time, you can start working towards creating a small farm that will allow you to create a good living on a small scale.

#### WHO AM I?

If we haven't officially met, my name is Moreno de Meijere. I'm a full time farmer, father of a beautiful daughter, husband of an amazing wife, and founder of The Dutch Farmer.



Since early 2013 I've worked in over 10 different farms in three different climatic zones world wide. Together with my wife we started a small scale organic market garden, and through my experience I now help aspiring farmers successfully start, manage and scale their own profitable no dig market garden.

#### WHO IS THIS GUIDE FOR?

This guide has been specifically created with the new, beginning, and aspiring farmers in mind. It will show you how you can get started in your farming journey, following a specific framework.

This guide is not going to share some 'super secret success formula' that's going to ensure you're going to become a successful farmer.

Instead, it will show you, from a a bird's-eye view, the 7-step process my wife and I have used, that allowed us to start our farm from scratch and allows us to make a comfortable living on our own terms.

I'm sharing strategies, tips and insights, I've learned through hard-won experience by starting our own farm, and the years I've worked for other established farmers.

#### Let's get started.

## STEP 1: CREATE THE FOUNDATION FOR SUCCESS

Before you start growing, before you do anything, research your market. Identify possibilities, crops in demand, and your potential customers.

On a small farm, the main focus for selling your crops should be through direct sales: CSA, farmers markets, restaurants and chefs, and optionally a farm stand. Only in case where it would practically make more sense, you can target wholesale customers, but these should not be your first choice when starting out. They require consistent deliveries, quality and don't buy your produce for the full price.



Delivering produce to a local organic store.

Go out there and unless you're selling through a CSA or at a farm stand, start identifying the actual demand in your area.

Starting with farmers markets. Visit several markets that could be of interest to you and observe what other farmers are offering. Take note of what sells well, and the crops that are slower to sell.

Look how much they're growing of specific crops, what they have at the beginning of the day and end of the day. Look at their pricing, their presentation, their customer service, and the types of customers they're serving, and ask yourself, is the demand higher than the supply? Or is the place saturated? Do they sell imported produce, or strictly farm grown products?

Also have a look at the local restaurant scene. Go out there and talk to some chefs to see if they would be interested in working with local growers. Ask them what types of crops they're looking for throughout the growing season. Ask them where they get their produce from now, and what they're paying for it. Having a basic understanding of the demand in your area, will allow you to grow towards that estimated demand, and not the other way around.

Once you've identified who your potential customers are, and you've verified the actual demand they have, I recommend that for your first year, depending on the size of your land, you grow the top 15 to 20 most familiar and profitable crops on that list.

Get good at growing those crops, and from there continue to work with the crops that are in demand and are selling well, and take out or reduce the amount of crops that are selling less. Then optimize from there.

Remember, your first year is all about experimentation, learning as much as you can about both the production side, and the business side of farming. Get an understanding of the actual demand in your area, and from there, optimize and improve your farming with each growing season.

#### **STEP 2: DESIGN YOUR FARM**

If you want to create a farm that is well organized, optimized for efficiency, practicality and ultimately profitability, creating a basic design of your farm is a must.

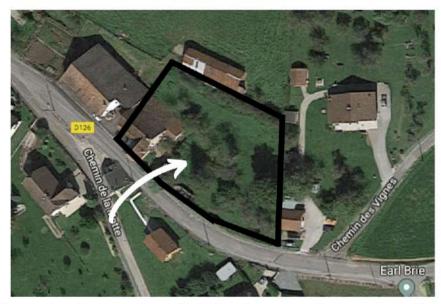
I've spent quite some time working on other farms and it surprised me that many of these farms failed to organize their operations, and create a basic design that takes into consideration the dayto-day work on the farm.

Elements where placed out of context, and this caused the farmers and the workers to lose valuable time in the process. Having said that, creating a farm design for a market garden is pretty straight forward.



When you start designing your farm, one of the first things you need to do is to create a base map and a sector map.

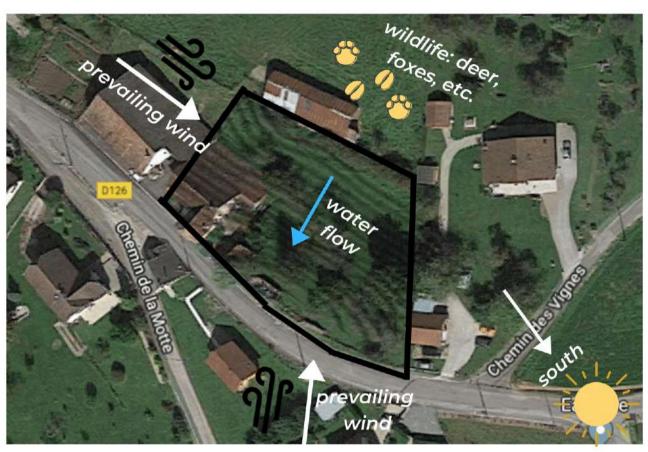
A base map is simply a bird's eye view of your property, including the boundaries and the existing elements on the property, like trees, fencing, buildings, etc. See example below.



Our farm before we arrived - image from Google Maps

Once you have your base map, it's time to create a sector map.

The way to do this is by taking your base map, and overlay all the outdoor sectors including, contour of the land, wind direction, sunlight, flooding/drainage areas, wildfire zones, wildlife corridors, noise, views, privacy, snow direction etc. Once you've included these external forces, your map will look something like this:

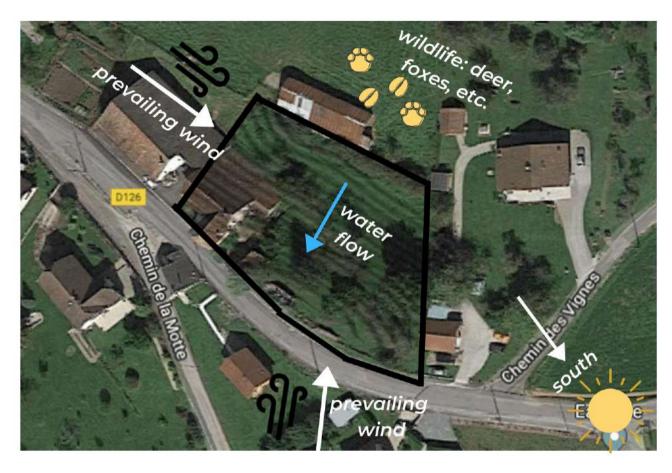


Example of our sector map

\*Tip: only include sectors that are significant and relevant to your property.

Identifying these sectors on your property can help you come up with ideas on how to minimize their potential negative effect, and even turn potential problems into solutions.

#### Take our sector map for example:



Knowing the prevailing winds our land is dealing with, we can decide to install windbreaks to reduce the negative effect the wind can have on the growth of our crops. This windbreak could consist of a wide variety of different useful shrubs, trees and plants, that would increase the overal biodiversity and potential crops we could get.

Another example is the wildlife our land is dealing with. Knowing where they come from, we can decide to install fencing on these locations. These are small things to consider at the design phase, but can have a great impact on the overall functioning of your farm down the road.

Once you have the base and sector map it's time to start including the necessary elements to run a market garden. These include, a post harvest station, permanent growing beds, tool/storage shed, a nursery, fencing, irrigation and optionally high tunnels.

Unless you already have buildings on your property that could potentially be used for things like tool/storage facility and a post harvest station, you'll have to create these areas.

Important thing to remember and to take into consideration when placing these different elements, is to think of the daily work you're going to do on your farm.

Your goal is to try and minimize the foot traffic you'll have to make between different elements, and to optimize the overall efficiency of workflow on your farm, whilst taking into consideration the sectors your land is dealing with.

#### **STEP 3: PLAN YOUR PRODUCTION**

After doing your market research you've got a good indication of what the actual demands are in your area. You can now establish a crop plan that will ensure a continuous supply of crops during the growing season.

The first time you're going to create a crop plan can become quite overwhelming at times. It's best to take some quiet time, when you're well rested, so you can focus for the task at hand.

The principles are simple, we need to make sure that we grow enough crops that will allow us to reach our financial goals. Therefore, we always start with our financial target as our first step.

Once we know how much money we need to make, we can now start breaking this down into a production system, that takes into consideration this goal, but also the local demand in our area.

With these two criteria we can now proceed to creating your plan.

We look at all the crops we've decided to grow, including the rough quantities we want to have for each crop.

We then start writing down every single seeding we need to do, to cover the weekly demand. Which goes as follows: let's say that after doing our market research, we've identified that there's an estimated demand of 90 bunches of radishes per week.

We then need to take a look at when we can have the radishes available during the growing season, using a crop availability list.

On our farm we can have our first crops of radishes available roughly around the 18th of March, in our high tunnel.

CROP AVAILABILITY LIST			
CROPS	AVAILABILITY	TOTAL # WEEKS	
Lettuce	April 15 - October 14	26 weeks	
Arugula	March 18 - December 16	39 weeks	
Radish	March 18 - June 17 / September 16 - November 25	13 weeks	
Carrot	June 1 - December 31	30 weeks	
Turnip	March 18 - June 17 / September 16 - December 31	13 weeks	
Spinach	September 16 - June 1	37 weeks	
Tomato	June 24 - October 14	16 weeks	

Tip: if you don't know when you can have your crops available in your area, talk to other local farmers and avid gardeners, or look at the recommended seeding times for each individual crop from local seed companies.

Once we know the date we can have a crop available, we need to know their days to maturity, with other words, how long it takes the crop from being seeded to harvest stage.

For radish this is on average 30 days. BUT, since we are very early in the growing season, I would add an additional 2 weeks to the average DTM.

In this case, if we want the radish to be ready for the 18th of March, we'll subtract 44 days from this date, to give us our first seeding date, which in this case is February the third.

This date we write down in our crop planning sheet like this:

**Crop: Harvest date: DTM: Direct seed date:** Radish March 18th 44 days February 3rd After we've identified the seeding date, we need to find out how many beds we need to seed. This is where a crop DTM & expected yield list comes in handy. See below the one we use on our farm:

CROP	DAYS TO MATURITY	EXPECTED YIELD / 33FT BED (10M)	
Arugula	35 days	20 pounds / 9 kg (3 cuts)	
Basil	60 days	27.5 pounds / 12.5 kg	
Bean	60 days	35 pounds / 16 kg	
Beets	65 days	45 bunches	
Beet greens	45 days	22 pounds / 10 kg	
Bok choy	60 days	120 units	
Broccoli	70 days	44 units	
Cabbage	90 days	44 units	
Carrots (baby)	65 days	60 bunches	
Carrots (Full size)	80 days	45 bunches	
Cauliflower	80 days	44 units	
Celery root	120 days	100 units	
Cilantro	35 days	350 bunches	
Cucumber	65 days	35 units / week	
Dill	60 days	350 bunches	
Eggplant	70 days	15 units / week	
Fennel	75 days	120 units	
Garlic	300 days	200 units	
Green onion	70 days	120 bunches	
Ground cherry (Physalis)	90 days	8.8 pounds / 4 kg	

CROP	DAYS TO MATURITY	EXPECTED YIELD / 33FT BED (10M)
Kale	60 days	40 bunches / week
Kohlrabi	55 days	120 units
Leek	95 days	180 units
Lettuce	60 days	120 units
Melon	85 days	60 units
Mustard	35 days	25 pounds / 11.3 kg
Onion	110 days	350 units / 110 lbs 50 kg
Parsley	70 days	350 bunches
Peas	60 days	22 pounds / 10 kg
Pepper	100 days	45 units / week
Radish	30 days	50 bunches
Spinach	45 days	25 pounds / 11.3 kg
Swiss chard	60 days	40 bunches / week
Tatsoi	35 days	25 pounds / 11.3 kg
Tomato	100 days	44 pounds - 20 kg / weel
Turnip	45 days	50 bunches
Zucchini	55 days	30 units / week

Since we've identified a demand of 90 bunches of radishes per week, and we know we get on average 50 bunches per bed (by looking at the above chart), we now know that we need to plant 2 beds of radishes to meet that demand.

This data we include in our spreadsheet along with the dates.

This little exercise we do for each individual crop we've decided to grow, to ensure we can meet the demand from our customers.

Once we have this foundation of our crop plan ready, we combine all the crops together, and we create a planting plan out of it, so we can make sure we have enough space to fit in all the plantings, and to ensure the exact placement of each individual crop during the growing season, whilst also taking into consideration basic crop rotation practices.

At last we take the dates of each individual planting, whether it's direct seeded or transplanted crops, and we write all of this information down into our yearly calendar.

	A	B	C	D	E	F
1	BED #	CROP + VARIETY	Transplant/Direct seeded date + Harvest date	BED #	CROP + VARIETY	Transplant/Direct seeded date + Harvest date
2	BED 1	Lettuce	T: May 10th - H: June 9th	BED 1	Beets	DS: June 15th - H: August 14th
3	BED 2	Lettuce	T: May 10th - H: June 9th	BED 2	Beets	DS: June 15th - H: August 14th
4	BED 3	Lettuce	T: May 10th - H: June 9th	BED 3	Beets	DS: June 15th - H: August 14th
5	BED 4	Lettuce	T: May 10th - H: June 9th	BED 4	Beets	DS: June 15th - H: August 14th
6	BED 5	Lettuce	T: May 10th - H: June 9th	BED 5	Beets	DS: June 15th - H: August 14th
7	BED 6	Lettuce	T: May 10th - H: June 9th	BED 6	Beets	DS: June 15th - H: August 14th
8	BED 7	Carrots	DS: April 5th - H: June 9th	BED 7	Arugula	DS: June 15th - H: July 30th
9	BED 8	Carrots	DS: April 5th - H: June 9th	BED 8	Arugula	DS: June 15th - H: July 30th
10	BED 9	Carrots	DS: April 5th - H: June 9th	BED 9	Arugula	DS: June 15th - H: July 30th
11	BED 10	Carrots	DS: April 5th - H: June 9th	BED 10	Arugula	DS: June 15th - H: July 30th

planting plan example

It's likely that when you first start out, you'll have to deal with quite some weeds and existing vegetation that you'd like to convert into a production area.

The way you're going to approach it is going to decide whether you're going to be faced with lots of weeding, or simple weed management practices.

In general terms, there are three main ways you can use, along with some variations, to convert a field of weeds into a production area.

**Option #1:** Probably one of the most familiar ways of preparing your growing area, is cultivating and tilling the soil with a tractor or walk behind tractor. Just using this option as a stand alone method is **not recommended!** By tilling the soil and plowing it, you will bring up the previously dormant stored weed seeds in the soil and create a perfect environment for these seeds to germinate. **Option #2:** is using a silage tarp to kill off the existing vegetation through a process called occultation. Depending on the type of existing vegetation you're dealing with, this tarp will have to be laid down anywhere between 6 to 12 months to be effective.

**Option #3:** uses the same principle of depriving the existing vegetation of sunlight, but instead of covering the ground with a tarp, a thick initial layer of compost is laid down on the surface of the soil, without integrating it. This process is called the no dig approach.

Having been largely inspired by permaculture and regenerative agriculture, for me by far the most appealing way of growing food is by imitating the way nature works.

If we look at nature, we know that fertility is built from on top. Leaves, branches, manure and any other form of organic matter fall on the ground and are processed and incorporated in the soil by the organisms.

## **STEP 4: CONVERT YOUR LAND**



Worms, fungi, bacteria and other microorganisms are favored by the elimination of tillage and the abundant food supply provided with soil covering.

These organisms take care of the constant nutrient cycling that's happening beneath our feet.

When the health of the soil biology is disturbed by sudden changes to the ecosystem, the overall soil health will be affected because of this disturbance.

A good example of this disturbance is tillage and the use of chemicals.

When we start tilling the soil and add chemicals, we are messing with the properties that determines the health of the soil and are creating an unfavorable environment for the soil biology to thrive.

Having said that, does this mean that you can never till the soil at all?

In my opinion, best would be to never till the soil, and use option #3, covering the growing beds with a 4 to 6 inch (10 - 15cm) layer of compost.

Though, this is not always possible. This thick initial layer of compost can add up quite quickly financially speaking.

This was the case for us. When we arrived on our farm in June, we wanted to get the production going as fast as possible. Instead of covering the whole area directly with the recommended depth, and since we were in a rush and on a low budget, we decided to do a one-time initial tillage. We then took out all the roots, clumps of grasses, and organic matter, and covered the beds with half the recommended depth:





#### **STEP 5: GROW YOUR CROPS**

On our farm we grow crops in two different ways. We start seedlings in the nursery which we then transplant out into the fields, and we direct seed crops. For each of the methods we follow a different approach.

The transplanted crops on our farm all get started in a dedicated nursery. Here we can tailor towards the needs of the small seedlings and allow them to grow into strong and healthy transplants.



Newly germinated lettuce seedlings

Knowing that this initial layer of compost was not going to be sufficient to prevent the germination of many weed seeds that inevitably happens when you till the soil, we made sure to stay on top of it.

All in all, the approach we took helped us to get started quickly, efficiently, and allowed us to grow great crops immediately.

As a finishing touch we filled up the pathways with wood chips and now have an abundant, clean, and profitable small farm.





For this process we use simple nursery trays. These trays come in many different sizes and dimensions to suit the needs of the specific crops that are grown in it. We fill up the trays with a high quality pre-made potting soil that consist mainly of peat, compost, vermicompost and perlite.

Before we fill up the trays, we make sure to moisten the medium a bit, we fill up the tray, compact it slightly, seed it, cover the seeds with a final layer of potting soil, water it down, and we're done.



Left trays filled with compost - Right seeding trays

Depending on the type of crop we're growing, we either transplant these seedlings outside into their final location. In the case of crops like tomatoes, we pot them up in larger pots with new fresh potting soil and grow them on several weeks longer till danger of frost has passed.

At this time we make sure to harden off the transplants, as to prevent a transplanting shock, and let them get used to the outdoor conditions. Just before we transplant them into their final location, we make sure the beds are prepared and are ready to receive the transplants.

Depending on the time of the year this means that we either broadfork the beds, apply compost and mark out the spacing needed for the crops.

Once we've transplanted the crop, we ensure that they're irrigated and keep them moist until they've settled in and are taking off.

The no-dig style beds on our farm really helps with the water holding capacity of the soil and keeps the whole area moist without having to irrigate as much. The direct seeding we do on our farm takes up a lot less time. For this process we use precision seeders. The Jang Seeder and the Six Row Seeder.

We use the Six Row Seeder for baby leaf crops like salad mixes and the Jang seeder for all our other crops and is our preferred seeding tool.

Unlike with the Six row seeder, who needs a near perfect bed preparation, the Jang is not as picky as to the way you prepare your beds, and does a good job of compacting the beds after seeding.

The steps we take to direct seed a bed are pretty straight forward. We make sure the bed is prepared, amended, and we simply pass the seeder over the beds.

Having said that, every crop grows differently and are seeded or planted at different spacing. Below I've included the crop spacing list we use on our farm that indicates the exact spacing for each individual crop. You can use it as a guide for your own farm.

CROP	# ROWS PER BED	PLANT SPACING	
Arugula	7 rows	1.25"	3cm
Basil	3 rows	10"	25cm
Bean	2 rows	5"	12.5cm
Beets	3 rows	5"	12.5cm
Beet greens	7 rows	1.25"	3cm
Bok choy	3 rows	10"	25cm
Broccoli	2 rows	18"	45cm
Cabbage	2 rows	18"	45cm
Carrots (baby)	12 rows	1.25"	3cm
Carrots (Full size)	5 rows	1.25"	3cm
Cauliflower	2 rows	18"	45cm
Celery root	3 rows	10"	25cm
Cilantro	7 rows	1.25"	3cm
Cucumber	l row	18"	45cm
Dill	7 rows	1.25"	3cm
Eggplant	l row	18"	45cm
Fennel	3 rows	10"	25cm
Garlic	3 rows	5"	12.5cm
Green onion (clumps of 5/10 plants)	3 rows	10"	25cm
Ground cherry (Physalis)	1 row	24"	60cm
Kale	3 rows	10"	25cm
Kohlrabi	3 rows	10"	25cm
Leek	3 rows	5"	12.5cm

Lettuce	3 rows	10"	25cm
Melon	l row	18"	45cm
Mustard	7 rows	1.25"	3cm
Onion	3 rows	10"	25cm
Parsley	5 rows	5"	12.5cm
Peas	l row	ו"	2.5cm
Pepper	1 row	10"	25cm
Radish	5 rows	1.25"	3cm
Spinach	4 rows	5"	12.5cm
Swiss chard	3 rows	10"	25cm
Tatsoi	7 rows	1.25"	3cm
Tomato	l row	10"	25cm
Turnip	6 rows	1.25"	3cm
Zucchini	1 row	24"	60cm



Direct seeding with the Jang seeder

### **STEP 6: MARKET AND SELL YOUR CROPS**

When the crops are ready, it's time to market and sell them to your customers. Whatever market streams you're selling to, promoting your produce, yourself and your farm is an important part of achieving success. The way you present yourself, the way you talk, the promises you make are all important when it comes to marketing. And this all relates back to branding.

The name of your farm, the message you tell people, the story of your farm, your values as a farmer. All these small things combined are what makes up your farm brand. And this can play a crucial role in the success of your farm.

The best way we can describe a brand, is that a brand is the personality of a business (your farm). When doing business with other people, whether you're selling produce to someone at the farmers market, to restaurants, or to grocery stores, it is important that they know WHO they're doing business with, and WHY they are doing business with you. With farming you'll be the face of your business. Much like a personal brand, you'll be the one that will reach out to potential customers and will have to promote yourself, your farm and your produce.



Delivering produce to our customers

The best way is to think of your farm as a person. What are the characteristics that makes up its personality?

- What is its name?
- How does it present itself?
- What does it communicate?
- What are the core values and what does it stand for?
- Who does it associate with?

A well defined business is able to answer these questions and clearly shows its potential customers why they should do business with it.

Are you starting a farm because you're tired of the way conventional food is being produced and you want to become the change you would like to see in the world? Or maybe you're expecting a child, are thinking about one or you're already a proud parent, and you would like to raise your child in an environment where an abundance of organic food is being produced. Or maybe you found out that your health is not going too good and would like to change the way you eat and live.

Whether you're not liking your job and want to transition, or you just want to have a more meaningful life.

Your story, your why, can play an important role in your branding. When done right, a brand can help a lot with the success of your farm business. Some of the objectives a good brand achieves are that it delivers a clear message, it can emotionally connect your target customers to you and your produce, it motivates them to buy from you, and it can create a strong customer loyalty. Obviously this just scratches the surface of marketing and branding, but the reason I'm sharing this is because I want you to understand that farming is more than just the growing of crops or rearing animals.

A farm is a business. You need to plan, you need to market your produce, you need to sell, and all the things that come with it. But above all, farming is fun, it's fulfilling, and it's life.



High tunnel production

## STEP 7: TRACK, KEEP RECORDS, AND OPTIMIZE



Analyzing crop data on the farm

One of the most important steps if you want to achieve success with farming is to keep track of everything.

Create basic spreadsheets for your farm. Whether it's crop production related or sales related, having basic spreadsheets for you farm is a must. When I first started out I was pretty overwhelmed with all the things that had to be done on the farm, that at the end of the day, I neglected this crucial part. Big mistake.

If you want to know how much yield you get from a bed, what inputs you have per bed, whether it's seed, compost, labor, or anything else, you've gotta keep records of it if you want to know that what you do is profitable, efficient, and even worth it.

I know it's not the most interesting part of farming, but it sure is really crucial for decision making and future planning of your farm.

Take the time to sit down a couple of hours per week analyzing your data. This will really help you get a better understanding of the functioning of your farm.

You might realize that a crop is not as profitable as you thought. Or you might realize that you can plant your crops a bit denser than you've been doing. Whether you need to know what you've actually sold throughout the growing season, or the days to maturities of the crops you've grown over the years, having recordings of all this data will allow you to continuously improve your farm each year.

TIP: Some of the data to track on your farm:

- Crop data including, days to maturity, yields per bed, input per bed, pest problems, densities, amount of seeds used, time spent from seed to sold produce etc.
- Sales & expenses data including, quantity of crops sold per week, weekly revenue per crop, actual demand versus available supply, weekly/monthly expenses etc.

Having detailed notes will allow you to improve your farming, and will allow you to optimize your production system so that you can become more efficient and profitable each growing season.



#### NEXT STEPS

You've learned some of the key steps, strategies and tips you need to start your journey into farming. I hope this eBook will function as a guide and helping hand for when you need it.

I also wanted to share something else with you that you might like...

I wanted to give you access to an online workshop in which I go deeper into how you can start a profitable small farm.

Best of all? It's free!

#### <u>Simply click here to watch the online</u> <u>workshop.</u>

Hope it helps!

All the best,

