

**CLIMATE CHANGE ADAPTATION**

# *A manual for Authors*

**Taking great photos for  
extension and research**



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## Taking great photos for Extension and Research



### Introduction

There are many steps required to produce effective extension materials, and great photos really help.

Sadly, too many of our photos don't measure up to the standards of

- Sharp/clear,
- tell a great message
- with a gender sensitive approach.

It isn't unusual to scan through our mutual efforts in publications and find examples that leave even the author wondering about clarity, and message.

When it comes to helping farmers understand research- the real thing is always best. The results happening in front of them, with them involved. However sometimes this isn't possible. In that

instance, a picture tells a great story. Farmers really like to see pictures- it helps them to understand what is being presented. Taking good photographs requires more preparation and care than normal photography. Plan your photography in advance. Make sure you have adequate memory, batteries charged or spare batteries and plenty of time. If you are new to this type of photography, work slowly and methodically making notes as you go. When you view your pictures, you can use the notes to recognise which techniques work and which don't (and hopefully understand why!)



This is a rubbish photo. Why?

Out of focus, can't see faces, nothing much happening, key person has his back to the camera. And not a hint of a woman anywhere. Is this only about men?

Getting great photos in workshops requires effort. And a good camera, lighting, action- writing onto butcher paper would help, smiles,...

### Layout

Just a word about what is happening on this page. A two cell table has been inserted. A photo opened – maybe 6 MB. A screen shot of the best part of the image taken, using snipping tool. Then that was inserted into the one cell table – via ctrl V. Paste. Then the table with two cells has been pushed into the text, once it was resized. Only resize on corners. Fat people and skinny



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people... NOPE that is a big nono. Otherwise use cropping tool- to reduce a top, or side of bottom.

### People, people, people

We are starting with the biggest challenge. Look at that photo of mine – it's an awful photo right? Lighting and movement and the fact that people don't all look at the camera and smile – these make people photos really challenging. I did get one thing right. I didn't have the sun streaming in via a window in background!

It is easy to take a photo that shows nothing other than a bright window with dark outlines of people. Plan carefully.



A great photo right? What makes it great. Smiles, Focus, Gender balance, the light is overcast, so not big shadow problems, no sun shining eyes of camera lens.

Cameras need – if a real camera, not a phone camera – a **UV filter** which protects the lens and reduces the washed out look of some photos.

You may need a clown standing near the camera person – and that clown does a small PNG DANIS- dance... to make people smile! Smiling is great!

### Arrange the subject and/or the camera to present the essential information as clearly as possible.

- Where you take the picture from (i.e. the position of the camera relative to the subject) is one of the most powerful photographic controls.
- Spend some time placing the camera (and the subject if it is movable) so the picture shows the features you wish to describe.
- With some subjects (e.g. animals) you may need to take several pictures to be sure of getting a good one.



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### Avoid cluttered pictures / Look at the background

- Make sure you cut out of the picture all the bits and pieces that detract from what the picture is saying. (This doesn't mean telling lies with carefully chosen photos that only tell half of the story...).
- Remember, later you can crop the image, or select bits you want – using snipping tool. It is my go to tool, as it crops as it goes.
- Look carefully through the viewfinder to see exactly what is included in your picture.
- We tend to concentrate on just the parts of the picture we think are important, but the camera will record everything equally. If there are any unnecessary features in your picture, remove them. It may be possible simply to move the offending items, or you may have to move your location.
- Before taking the picture, look carefully at the edges of the viewfinder frame. Are there any distractions at the very edges of your picture? If so, get rid of them. (If you can't get rid of them remember that you can edit photos/crop photos later once they are in a digital format on your computer.

### Move in close – fill the frame with the subject.

- Having checked your picture, check it again. Probably the easiest way to improve many photos is to get closer. (Don't just use the zoom feature on a digital camera as you may lose picture quality. Move closer before using the zoom facility).
- Some digital cameras have an option called close-up- use the image of a tulip flower to allow you to get close to the item.
- Be careful with some simple cameras that you don't move too close. If you can focus the lens you will be able to check focus, but with many simple non-focus cameras anything closer than a metre will be out-of-focus.
- Check this by taking some photos and measuring and recording distance from lens to subject. See how they turn out.

**When taking photos of people in a room – a training room a church, a hall – the most common mistake is to have windows in the background, letting in heaps of light. Your photo will show very dark faces. A flash will help. But so will moving your position with the camera – shift so that the camera isn't looking at windows.**

### Sun

- Bright sunlight can help, but often it makes our photos very challenging.
- Think. Stop. Think – where is the sun. Basically never take a photo with the sun near your face. Shift. Turn around. Move around. Get the sun behind you.
- Get people into full shade or full sun. Not half half..



## Using close up?



**Plate 1** Two photos, but each tells a different story. Use close-up facilities wisely. Where is a key or Kina coin to show scale?

## Decide what information is required in the picture

- Get close enough to show important information.
- Know your camera- how close can you go?
- This is the most important step. If you are photographing a plant, or animal for example, include just the one specimen in your picture and make sure the subject fills the picture area.

## Look carefully at the background – will it interfere with the subject?

- Depending on the subject matter, there may be little you can do about the background.
- However in many cases (e.g. photos of small specimens, particularly where these are moveable) you can improve the picture by having a simple, plain background that contrasts with your subject.
- You may be able to use the wall of a building or introduce an artificial background (e.g. a piece of clean card) to separate your subject from its surroundings. (The close-up photos of insects in this section were taken on a canvas hat- you didn't notice that- and that was the way it was designed!).

## If a horizon is included in the picture, make sure it is horizontal!

- If this seems obvious, think again! It's amazing how many photos have sloping horizons.



- This is easily corrected, but you must think of it first!



**Each  
picture  
should tell  
a story-  
here we  
are  
showing  
how much  
fertiliser to  
use...**



It is possible to get very close with some digital cameras. These beetles were taken with a low resolution, Sony camera, set to wide angle and then focused in very close. The matchstick gives a very reasonable indication of size. Always seek to show size- pens, Kina coins, a hand are good. For scientific reports, you will need a cm rule.

### **Examine the lighting carefully before taking pictures**

- If there is a bright background your photo is likely to look very dark and will be poor quality. Taking photos inside of a person standing near a window will ensure the person will just be a silhouette.
- Is part of the subject in shade and part in sunlight? If so, the two parts will not record well in your picture. Ensure lighting is even over the whole of your subject.
- The best lighting to use is bright overcast (no strong shadows). If you can wait for a bright cloudy day, do so. If not, you may be able to photograph small moveable subjects in an area of open shade (e.g. the shadow side of a building). Or you may be



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able to use a well-lit area indoors, but be careful to turn off any artificial lighting! Working indoors may require long exposure times (anything longer than 1/60 sec can cause blurred photos), so be sure to use your tripod.

- You can take good photos on a sunny day but the lighting is more difficult to control. If you are working with small subjects in a sunny situation, you can improve your pictures by using a reflector board (any large white surface) near the subject (but out of the picture) on the opposite side to the sun. This will lighten the shadows, making it easier to see detail in both highlight and shadow areas.
- If working in a large-scale situation, work with the sun coming over one shoulder (i.e. not directly behind you and not too much to one side). Avoid shooting into the sun (i.e. with the sun in front of the camera)—this can produce effective lighting for some situations but is difficult to control.

Include labels and/or scale as appropriate



**Plate 2 Background is good- but labels and scale need improving. These are not good enough.**

**If leaves are important, then take some close-up photos of the leaves separately.**

- Plan ahead.
- Include a label in each photo – prepare this before you go outside to take photographs.
- If you are photographing a series of subjects, it is vital to know what treatment is being recorded in each picture so that you can correctly identify your pictures in the future (Think international conference?).
- Labels must be legible and neat and the right size- normally plain fonts set at 36 points will work well.



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- Hand written labels can look scruffy and give your work a slapdash appearance.
- Prepare your labels on a computer...keep the amount of text to a minimum.
- You will need to prepare some system of supporting the labels in your pictures.
- Make sure the correct label is used in each picture!

### Managing your photos

Entering images into powerpoint or word... can be a pain if you copy and paste. Cameras may take a 10 or more MB image. This blows out the size of a file, making emailing very challenging.

I open the file on my computer, then go to Windows Accessories, Snipping tool and take a snip. Paste the snip into a one cell table in your document.

That allows you to push it into the text for wrap around.

### Phone cameras and storing on google

These are wonderful for most purposes.

Consider setting the image size to about 2 MB. You seldom need these modern 8 MP images that eat memory and data when they are stored.

My phone uploads photos to google and keeps them safe<sup>1</sup>.

Your extra special photos – store them onto CD-ROM? Memory sticks have a way of dying.



Leaves, flowers, pods, and a scale. This photo feels like we are getting close to a really clear photo. What do you think? Note the use of a blue cloth to provide clarity to green leaves.

Good photos take time.

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<sup>1</sup> Until some nasty mob ruin my day in a hacking effort. It hasn't happened yet.



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### Some examples to consider

Be critical of your photos. Don't accept second best. Go back and take another purpose made photo.



Pretty useless photo. No flowers or seeds. Contrast with sun and dark. This photo is unuseable!



Getting better. Scale, clear background. Almost no words need be used. Harvest your beans before totally mature, esp in wet weather as rotting is a major problem. Em tasol.



On the left, quite clear? Size? A hammer on the top or somewhere would have helped us understand. Or an arm on side...?

The right hand side photo. The key person has his back to us. We are not sure what is happening. What is the key message? Most photos need a Key/Clear message.



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What's good and bad here?  
The image is washed out?  
Why?



Snipping tool can help us  
focus on a good photo  
inside the image, but it is  
still washed out and not  
really focused well. And the  
child is looking in a different  
direction.

Can't use this photo.



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Snipping tool helps to get to the important.



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Scale. Up close and sharp. But too close – we need to see more of this highlands pitpit – Moku- for those who are not familiar with it. And provide a name!



Scale? Name? some of you know this, but if you didn't – you are not helped really. Needs more information. A sense of where it is used etc.



## Taking great photos for Extension and Research



Two photos, side by side, can tell a powerful story- in this case soil loss.

Beware the many small photos. They can quickly become useless. Yes, they saved paper. But the message was lost. Fewer photos maybe better. Here's an effort at providing context, then detail. What do you think?



## Taking great photos for Extension and Research

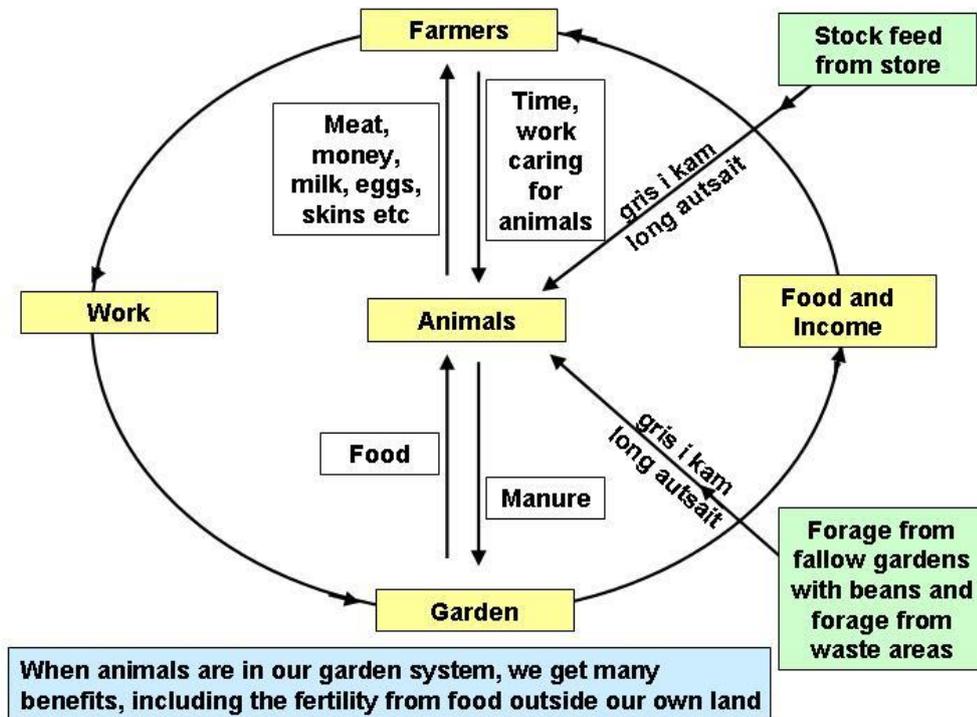


<p>Without mulch</p> <ul style="list-style-type: none"><li>• Kina coin helpful to show scale?</li></ul>	<p>With mulch –</p> <p>The pictures didn't want to fit on one page – I made them, by using cropping rather than resize.</p>
<p>See how we failed to align things in this series? Irritates the eye? Right? These text boxes should be same size as photos, then the page would look great. Or better!</p>	<p>CRAP – That is another story and relates to Contrast, Repetition, Alignment and Proximity. This relates to elements on a page. I try to follow those rules.</p>

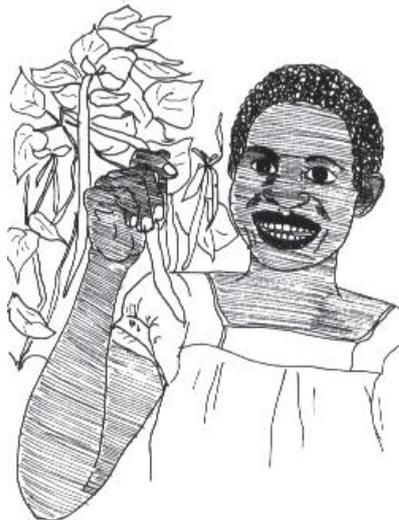


### Line drawings in Powerpoint may help

Role of animals in soil fertility and family well-being



Sometimes, a line diagram produced in powerpoint is a powerful explainer?



### Line drawings may help?

We have lots of line drawings available. Just ensure you note David Takus as artist if applicable.



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Below – arrows might be useful to make the picture clearer?



Collect some manure and make a simple experiment with a crop like pak choi or corn.

Chinese cabbage, with rabbit manure and without manure



1.3 m high with no added fertiliser or manure.



If a label is used, make sure it is way better than this one. Sori tru. This was meant to tell the story of rabbit manure and a control. With a photo like this, drop it into Powerpoint and add the text box over top of label, then snipping tool to bring it into the document you are working on.



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After green manure legume  
(Calopo)



Corn after weeds



Corn was much better after Calopo

Corn growth  
was very  
poor  
after  
weeds

Consider whether it is good to create one image from many images?

Be prepared to use section breaks. Layout – portrait, landscape.



## Making use of known items?



If 40 kg of fertiliser cost	A <b>matchbox</b> (20g) of fertiliser would cost the farmer	A <b>lid</b> of fertiliser (7 g) would cost
K200	10 toea	4 toea per lid
K400	20 toea	8 toea per lid