

1 **INTERVIEW TRANSCRIPT**

2 INTERVIEWERS: Dolores Rey (Cranfield University)

3 DATE: 19TH FEB 2015

4 FARM LOCATION (NUTS3): UKH13 (Norfolk)

5 ***Interviewers (I)***

6 *Grower (G)*

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8 **I: Let's start by talking a little bit about your experience in the farm business.**
9 **For how long have you been here? Crops that you grow? Livestock?**

10 G: I started to work in 1974. I have an agricultural degree by the University of
11 Reading. I worked from 1979 to 1997 on a Estate in East Norfolk, and that was
12 arable but no irrigation at all. And that was livestock as well. I came here in 1997,
13 and we have grown potatoes with irrigation. I am the farm manager.

14 **I: Now let's talk about how previous drought affected your business. You said**
15 **in the survey that in 2003 you have low impact from that drought. Can you**
16 **remember anything about it? I know it was quite a long time ago...**

17 G: It was a long time ago, I can't remember...2003, can I check my files so that will
18 help me remember?

19 **I: Yes, sure**

20 G: I can't remember... If it would be terrible I would have remember, so I don't think
21 it was...

22 **I: OK, and what about the last drought in 2010-2012?**

23 G: 2011-2012, this was low yields and poor quality....2011-2012 so it will be harvest
24 2012...Yes, they died early. I can't remember what the yields were but there was an
25 impact that year. And yes, we had quality issues because they stopped growing and
26 they started again once we struggled to get the irrigation to one particular field and
27 we end up with misshaped potatoes

28 **I: And do you have then problems with supermarkets or processors?**

29 G: No, they are all going to processors. We don't grow anything for supermarkets,
30 well not directly anyway. And that year we did have problems with processors
31 because of the misshaped tubers didn't stored very well because of the second
32 growth...

33 **I: And do you have room for negotiation?**

34 G: That year we did because they were totally sold, yes.

35 **I: How do you feel the drought that impacts the fields are going through the**
36 **whole supply chain? I mean, if there is a drought and it impacts yields and**
37 **quality, what would be the impact for supermarkets or...?**

38 G: Well, we are probably still seeing the impacts of that year because it knocked
39 back potato consumption. People went off potatoes onto alternative products as
40 pasta mainly. That is how I perceive it, I might be wrong but I think that is what
41 happened. The processors certainly said that they saw impacts on the consumption
42 on crisps that year because they lowered their standards and that had an impact on
43 consumption as well.

44 **I: And any impact on livestock in that drought, 2011-2012?**

45 G: Uhmmm, no, I don't think so.

46 **I: Now, talking about S57, you said that you didn't suffer any restrictions in**
47 **the past...**

48 G: No, I haven't.

49 **I: What is your feeling about S57 in terms of if you have enough information**
50 **from the EA when there is a drought, if farmers have the feeling that they have**
51 **all the information, they know the triggers...?**

52 G: I don't think the EA is very good at communicating. We tend to get our
53 information from our WAG. But the EA probably don't even have my email...

54 **I: Really?**

55 G: I doubt it. Well I said I don't use it...

56 **I: Talking about drought management strategies, could you tell me a little bit**
57 **more about the decision process? Maybe at the beginning of the season you**
58 **think it could be a dry period so you start doing some changes, and then**
59 **when the problem is bigger...how do you manage that?**

60 G: It is quite simple really. If we think there is going to be a drought, we carry on as
61 normal, because the greatest benefit from irrigation...well, we are only irrigating
62 potatoes. We haven't got enough water to do anything else. The greatest benefit
63 from irrigating potatoes is to get the water on early, and then if there are any
64 restrictions then we will have to accept lower yield at the end...But you get the best
65 results from early application. So we do that. And then in those...in harvest 2012
66 and harvest 2013 we run out of water, we didn't have any restrictions but we run out
67 of water. But I was able to get some more...

68 **I: So have you ever participated in water trading?**

69 G: Yes.

70 **I: And are you happy about how this work?**

71 G: No...

72 **I: OK, can you tell me a little bit more about this?**

73 G: Yes, if I think we are going to run out of water...No, well, in 2012 was the first
74 year we did it. In this catchment there are 3 abstractors, and when I first enquired
75 about it, the EA was very helpful and told me that we can trade between the 3 of us.
76 That is the only trade we are allowed to do. So I talked to one of the farmers, who I
77 knew through conversations that he wasn't using all his water, because he was
78 growing sprouts and stopped growing sprouts because he wasn't able to get any
79 money out of it. And so he has surplus water so I said to him: Could we trade
80 water? And he said yes. So we went to the EA and they had to go away and think
81 about it for a while. And then they came back and they were very helpful and said
82 that is OK, we just need to let us now...I was able to use my neighbour's water and I
83 sent him a cheque for it, I don't remember how much I paid for it. And then, in 2013
84 the same thing happened, another drought, we run out of water again. So I rang
85 them up, and they let me do it, so we traded again (I can tell you the quantities if
86 you want...). But they said, if this is going to carry on we need a more of a formal
87 plan rather than this ad hoc ringing up when you are getting shocked. I have some
88 views about that...I don't see why is that a problem...I cannot
89 understand...Presumably the EA monitors the levels in the catchment, I know they
90 do because they have well points. So why do they have to know in advance if I want
91 to trade? Because I don't actually know until there is a drought, and you can't
92 predict a drought...So I don't know if I wanna trade or not until....you could say a
93 month beforehand but is probably more like a fortnight beforehand you know you
94 are gonna run out of water.

95 **I: Yes...That is the problem with water markets, when there is a drought and**
96 **you need the water, maybe you have to wait a lot of time for approval and you**
97 **need the water now...**

98 G: Yes, but surely the EA is continually monitoring the water levels in the
99 catchment so they should be able to make almost instant decisions about whether
100 trading can go on...I don't know...I know nothing about it, I would thought it is pretty
101 busy...

102 **I: Could be...yes. And would you consider that after being affected by several**
103 **droughts in the past, your attitude towards drought risk has changed over**
104 **time?**

105 G: No, I don't think so...

106 **I: OK, and what would you do in terms of water management if droughts and**
107 **water scarcity would become more frequent in the future?**

108 G: Well, we will have to obtain a bigger licence. In the moment we have got enough
109 for 150 mm more or less. And they tell me that probably they ought to be more like
110 200 mm for irrigating potatoes. So we are a little bit short on the areas that we are
111 growing.

112 **I: Is it easy to get more licences here?**

113 G: No, we probably have to put a winter storage system.

114 **I: What do you think about the help that you receive from the EA, NFU, UKIA,**
115 **WAG, ...when there is a drought? Do you think they are helping with the**
116 **mechanisms they put in place during those periods?**

117 G: Well, as I already said that I think the EA could be a bit more open to instant
118 decisions. Well in the past they have made instant decisions, but I was just told
119 when we sort it out last time in 2013 that they didn't want to do that, that they want
120 more like a plan. I don't understand why...And then, otherwise...I don't have much
121 contact with the NFU. If there is any question about water trading or any advice
122 required I will go to my WAG.

123 **I: Now, talking about the key issues that could be improved in drought**
124 **management in this country, you said that could be the removal of S57, the**
125 **development of a crop insurance, water trading, forecasting and**
126 **information...so what do you think are the key issues here?**

127 G: Well, I have already mentioned that water trading should be more streamline and
128 quicker. Forecasting will be good but I am not sure that it could be possible...I don't
129 know. It could be good if we can forecast well in advance...S57 is rather draconian
130 thing, isn't it? But I realize there is conflicting demands for water and probably
131 farmers are in the bottom of the list. Well, I can only think of 3 demands for water:
132 environment, agriculture and public water supply, and I think agriculture is at the
133 bottom, environment in the middle and water supply is first. When there is a drought
134 I can see the Norfolk Naturalist Trust people coming to our stream once a week and
135 looking over the bridge to see what is the water level in our stream. Because the
136 stream is a chalk, so it is directly connected I think to the aquifer below

137 **I: In your opinion, what lessons can be learnt from previous droughts? What**
138 **things worked...?**

139 G: Well, water trading worked because we were able to get more water. And
140 because I was able to wait as long as possible...If you can wait for as long as
141 possible before you say: right, I want to do a trade. Then you have a better idea of
142 the amount you need to trade.

143 I think, if I remember right, in 2012 we agreed to a certain amount, probably 20
144 thousand cubic meters. And I think I had to come back to the seller for another 5,
145 whereas the last time it was 20-30 and I got it right. So it is a question of judging the
146 amount you need.

147 But I have some help with that because we use Cambridge University Farm
148 Irrigation Scheduling, so I can ring up my neighbour and he knows what is the stage
149 of the crop and we can make a judgement about how much water we will need to
150 apply. So that is how we will manage it in the future, just that sort of thing

151 **I: As you are saying this, maybe water option contracts could be a solution.**
152 **So the EA will know in advance that you are interested in buying some water**
153 **from your neighbour and then if there is a drought you can have access to**

154 **that water and if not you will only have to pay a small premium to this farmer**
155 **to have the right to buy the water**

156 G: Yes, that possibly could work, although I am not sure about the cost of it...

157 **I: Would you like to add anything?**

158 G: Yes, I am not sure about water option contracts because I know him and I speak
159 to him, and I know the other one...so we know each other, do we really need
160 something formal? There are only 3 of us in the catchment...

161 **I: Yes, well I was thinking more about the thing that the EA said about that**
162 **they need to know in advance...**

163 G: Why do they need to know? I don't understand...I think it is just to cover all the
164 legal aspects and fill in all the forms...and they don't want to do that in a panic. But I
165 can't understand why they cannot do it in a ...well not a panic, but with a certain
166 amount of warning. I cannot see what it can't be done in a fortnight warning

167 **I: Anything else you want to talk about in relation to drought management,**
168 **your experience?**

169 G: No...we have looked at alternative methods...We looked at drip irrigation, we still
170 look at drip irrigation but I can't really think it is gonna work for us yet

171 **I: It is a huge investment...**

172 G: Yes

173 **I: I have been talking to some farmers and all of them are willing to do**
174 **something but at the end it is a lot of money, like building a reservoir or...**

175 G: Yes, well maybe the other thing we could do is building a reservoir. That is
176 probably more likely than drip irrigation...Yes

177 **I: Also they were saying that you need to have space to build the reservoir**
178 **and sometimes is land that you lose for other crops...**

179 G: The other thing about drought management that gets me a bit is that I have...or
180 we have been honest. When we have run out of water, we have tried to trade. I
181 know that some farmers are not honest at all...

182 **I: What do you mean?**

183 G: Well, they turn the meters back, the stop the meters, the move the pumps from
184 one place to another...and I feel a little bit....well, it is not good.

185 **I: Of course... you are struggling to get water and...**

186 G: I try to be honest and I know that a lot of other people aren't.

187 Some neighbours with, well I don't know how the system works, but strawberries
188 are being grown under tunnels which must use a lot of water but there is no water
189 there...It doesn't seem fair sometimes...

190 **I: OK, thank you very much for everything**