

# Multiple Responses to Stopping Irrigation on Farmland in 2015 in Taiwan

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Because of the rainfall shortage during the second half year of 2014, the major water reservoirs in Taiwan except Taipei Fietsui Reservoir have all been suffering from the problem of insufficient water storage. The drought disaster emergency responsive team at Ministry of Economic Affairs (MEA) announced the stop of farmland irrigation in the first rice-farming season of 2015 in five agricultural regions, including Taoyuan, Hsinchu, Miaoli, Taichung, and Chiayi, covering 41,576 hectares of farmland. In the meantime, Council of Agriculture (COA), Executive Yuan responds to this announcement through the following five reactive methods in order to secure the right of farmers.

1. Provide multiple alternative options:

COA refers to the policy of “Operations on Coordinating Agricultural Water Usage” by MEA to calculate the compensation on 2015 1<sup>st</sup>-season fallow, by using per hectare average farming earnings plus 5% as an inflation rate. The amount of compensation varies according to the land usage during the period of stopping rice irrigation: (a) \$NT85,000 per hectare for fallow with growing green manure; (b) \$NT78,000 per hectare for fallow with digging but without growing green manure; (c) \$ND39,000 per hectare for transferring other crops, free on farmer’s own choice according to the land condition.

2. Multiple funding sources:

It is estimated that a compensation amount of \$NT3 billion is allotted this time for stopping rice irrigation. This amount of compensation is co-financed by several relevant government agencies, including COA, MEA, and Ministry of Science and Technology (MOST). For instance, the compensation option of \$NT85,000 per hectare for fallow with growing green manure will be funded at most \$NT45,000 per hectare by COA, and the rest of the amount will be shared by the funding from MEA and MOST.

3. Ensure the right of farmers for compensations:

Most of the current rice farmers are self-employed and farm their own lands. Therefore, they are surely able to receive compensations upon stopping irrigation. On the other hand, for tenant rice farmers, they will receive compensations according to farmland leasing contracts with the land owners (*i.e.*, landlords already receive the rent from those kinds of tenants). Lastly, for those tenants with leasing contract with distribution harvest ratio terms, they should also negotiate government compensations accordingly, or by the specific agreement terms in contract.

4. Provide financial and non-financial assistances to stakeholders in the industry:

First of all, there will be \$NT1,500 per hectare compensation for rice seedling firms. In addition, COA will help firms to handle matters for refrigerating and storing seeding in the first season of 2015. In addition, COA will release agricultural credits during the fallow by issuing special projects of policy loans, covering agricultural machines, “small landlord big tenant” project, and assistance to rice agribusinesses. During this period, loan repayments can be extended up to six months with free interest.

5. Monitor the rice inventory and price:

Among the 41,576 hectares of farm-land that will cease to be irrigated, 54% of the land-size, or 22,000 hectares, is for rice farming purposes. Thus, it is estimated that there will be 120,000-ton rice production shortage compared with the normal rice supply island-wide. Yet with 870,000-tons of public grain stocks by the government, including 330,000-tons of fresh rice (rice produced within one year), there is no worry about insufficient amount of rice supply. Moreover, the government will closely monitor the rice price to ensure stability.

In addition, COA also responded to farmers’ requests regarding their rights by offering the following five programs.

1. Plan for a registration system of farming labor service providers:

Farming labor services usually count on oral agreements with self-employed farmers who hire them. Therefore, stopping irrigation will cause the breach of oral agreement without any proof. COA announced to plan for a registration system of farming labor service providers by establishing a platform at Farmers’ Associations. Meanwhile, Farmers’ Associations will be required to assist the verification of the registered service providers and their operation information in order to build a database for future references in the fallowing of their farmland.

2. Establish technical assistance mechanism for dry crops:

On considering water saving and food supply, COA will invite technical expertise and agricultural researchers from Agricultural Research and Extension Centers in each region to organize technical service teams for technology and knowledge transfer specifically on dry crop farming. Particularly for big-scaled tenant farmers, they are targeted as the priority to transfer into farming dry crops in order to effectively save more water as well as raise the rate domestic food supply. Thus, water-saving agriculture will be gradually achieved eventually.

3. Raise the dry crop compensations in stopping irrigation area:

COA refers to the policy of “Operations on Coordinating Agricultural Water Usage” by MEA to calculate the compensation for stopping irrigation area with additional 5% mark up as an inflation rate. In addition to compensations granted to farmers based on \$NT85,000 or \$NT78,000 per hectare, there will be \$NT39,000 per hectare compensating for transferring other crops. In order to fully utilize the land usage, farmers in the stopping irrigation area can seek for other sources of water and/ or transfer farming other crops. The compensations are listed in Table 1.

Table 1. Compensation calculation basis for stopping irrigation area

Compensation guideline	Compensation Amount	
Stop rice farming and other crops, but with growing green manure	\$NT85,000 per hectare	
Stop rice farming and other crops	NTD78,000 per hectare	
Stop rice farming but transfer into other crops, or farm long-life crops with water	Transfer (contracting) farming	Compensation
	Hard corn, non-GMO soybean,	\$NT62,000 per hectare

supply from members of irrigation Association	wheat, buckwheat, sesame, coix, Chinese mesona	
	Grass, green-cut corn, edamame	\$NT52,000 per hectare
	Carrot, lettuce	\$NT41,000 per hectare
	Dry crops and/or special local crops by water sources from Irrigations' Association	\$NT39,000 per hectare

4. Provide special aid to agricultural loan:

The government provides policy loans for the agricultural sector, including agricultural machine loans, “small landlord big tenant” loans, farmer new venture loans, and assistant loans to agribusinesses. COA will release agricultural credits to those who have financial difficulty during fallow period. Loan repayments can be extended up to six months with free interest.

5. Restrict the current land user farmer to claim the compensation:

Most of the current rice farmers are self-employed and farm their own lands. Therefore, they are surely able to receive compensations upon stopping irrigation. On the other hand, for tenant rice farmers, they will receive compensations according to farmland leasing contracts with land owners (*i.e.*, landlords already receive the rent from those kinds of tenants). Lastly, for those tenants with leasing contract with distribution harvest ratio terms, they should also negotiate government compensations accordingly, or by the specific agreement terms in the contract.

Lastly, COA is committed to call a national meeting for water resource in 2015 in response to water concerns by farmers and farmers’ leagues/ associations. The meeting will invite representatives from various interest groups to join discussions with experts and professional researchers in line with water environment problems due to global climate change. Major problems such as frequent interchanges between flood and drought caused by extreme weather demand a complete assessment and reflections on the current water resource policy. Further, the meeting intends to make consensus on moving forward to next-stage water policy. COA will keep an eye on reflecting water policy views to other government divisions regarding the water right for agricultural stakeholders, including farmers and farmers’ associations.

(Data Sources: Doc#7145, COA)

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