**Correction:
On Implicit Function Theorems for Set-Valued Maps and
Their Application to Mathematical Programming under
Inclusion Constraints**

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Our paper [1] needs the following correction:

The gradient sets $\partial_x g_i(x, p)$, $i = \overline{1, m}$, which appear on pages 45 and 46 should be replaced by the sets

$$\hat{\partial}_x g_i(x, p) := \{\pi_1 A : A \in \partial g_i(x, p)\}, \quad i = \overline{1, m},$$

where

$$(\pi_1 A)(x) := A(x, 0), \quad \forall x \in X.$$

The reason for this is that the statement (page 45) saying that the set-valued map $(x, p) \mapsto \partial_x g_i(x, p)$ is usc is, in fact, incorrect.

Noting that $\partial_x g_i(x, p) \subseteq \hat{\partial}_x g_i(x, p)$ and that the set-valued map $(x, p) \mapsto \hat{\partial}_x g_i(x, p)$ is usc we see that Corollary 2.2 and the arguments proving it remain true if the above replacements are made.

Reference

1. Dien PH, Yen ND (1991) On implicit function theorems for set-valued maps and their application to mathematical programming under inclusion constraints. Appl Math Optim 24:35–54